

// GATE 0 · CONSTITUTIONAL PRE-EXECUTION LAYER · SYSTEM ARCHITECTURE V2.0

The Layer Above Secondary Law.

Refinitiv checks lists. ComplyAdvantage checks rules. LexisNexis checks databases.

Not one of them checks whether the legal framework itself holds together.

Gate 0 is the only system in production that runs a constitutional pre-execution check — before any sanctions screening, before any AML check — to determine whether a transaction is structurally possible under primary law.

No other compliance system in the world does this. — Not Refinitiv World-Check. Not ComplyAdvantage. Not LexisNexis Bridger. Not NICE Actimize. Not Dow Jones Risk & Compliance.

They check secondary law. Gate 0 checks whether secondary law itself is constitutionally coherent — before the transaction executes. Not after.

9 5 14 53 200+ <200ms

HARD_BLOCK CONDITIONS FUNDAMENTAL_RIGHTS_HOLD TOTAL NORM COLLISIONS CODED JURISDICTIONS WITH FULL GATE LOGIC (C) / BVERFG / ECHR RULINGS GATE 0 EXECUTION TIME

// SECTION 01 — INDUSTRY ANALYSIS

The Blind Spot of the Entire Compliance Industry

Every major compliance system on the market checks secondary law. None of them check primary law. Gate 0 is the first system to encode this check in production.

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Question: “Does your compliance system check DORA?”

CCO: YES ✓

Question: “AMLA 2024?”

CCO: YES ✓

Question: “NIS2? GDPR? MiFID II? Basel IV?”

CCO: YES YES YES YES ✓

Question: “Does it check whether this transaction collides with Art. 7 of the EU Charter of Fundamental Rights — before it executes?”

CCO: [Silence] ■

No compliance system in the world — not Refinitiv World-Check, not LexisNexis Bridger, not ComplyAdvantage, not NICE Actimize — analyses whether **two norms from different jurisdictions are in a structural constitutional conflict** that makes a transaction **principally impossible**.

They check lists. They check rules. **They do not check whether the legal system itself contradicts itself.**

This distinction is not academic. It has material consequences for every institution operating across US and EU jurisdictions simultaneously. Every day, institutions execute transactions that are **HARD_BLOCKED** under primary law — and no existing system flags it.

Gate 0 is the first system in production to encode this check. When a transaction falls into a constitutional collision field, Gate 0 issues a signed, Merkle-chained receipt **before the transaction executes** — documenting the specific collision, its legal basis, and the moment of detection.

— immo.quick Gate 0 Full Analysis · Collision Register COL-001-COL-009 · 53 Jurisdictions · June 2026

// SECTION 02 — STATE MACHINE

Three States. No Probability. No Grey Zone.

Gate 0 never returns a risk score. Never returns a probability. The output is always binary and deterministic — a machine-readable, forensically sealed artifact.

●

CLEAR

No constitutional collision detected in the applicable jurisdiction set. The transaction may proceed to secondary law screening (Gates 1-7).

- Pipeline continues to Gate 1
- Signed CLEAR receipt issued
- Merkle-chained to subsequent gates
- Valid-time + transaction-time sealed

PASS → PROCEED TO GATES 1-7

●

FUNDAMENTAL_RIGHTS_HOLD

A fundamental rights tension has been detected that requires explicit human legal review before proceeding. The collision may be resolvable — but not automatically.

- Pipeline paused — human review required
- Signed HOLD receipt issued immediately
- Specific collision documented with legal basis
- Escalation path: CCO → Legal → Board
- Full audit trail preserved regardless of outcome

HOLD → HUMAN LEGAL REVIEW REQUIRED · 5 CONDITIONS

HARD_BLOCK

Structural legal impossibility. Compliance with all applicable binding legal instruments simultaneously is not achievable without a legislative change. The transaction cannot proceed.

- Pipeline terminates immediately
- Signed HARD_BLOCK artifact issued
- Specific collision field documented (COL-00X)
- Legal instruments in conflict named
- Binding judicial source cited
- HMAC-SHA256 + ML-DSA-65 sealed

BLOCK → STRUCTURAL IMPOSSIBILITY · 9 CONDITIONS

Not “probably a problem” — binary · deterministic · HMAC-SHA256 sealed · ML-DSA-65 post-quantum signature · Merkle-chained · evidentiary_grade: true · expires_never: true

// SECTION 03 — COLLISION REGISTER · HARD_BLOCK

9 HARD_BLOCK Conditions — COL-001 to COL-009

Each collision field is derived from binding rulings of the ECJ, BVerfG, or ECHR. These are not interpretations or risk assessments. They are encodings of decisions courts have already made.

COL-001 · SANCTIONS / ANTI-COERCION

OFAC 31 CFR 501 ↔ EU-VO 2271/96 Art.5

US secondary sanctions vs. EU Blocking Regulation

US law requires EU entities to comply with OFAC restrictions. The EU Blocking Regulation requires EU entities to actively resist US secondary sanctions. Both laws are binding. Both are violated by any choice the institution makes. This collision has existed since 1996 and has never been legally resolved.

HARD_BLOCK

BuGH C-124/20
Bank Mellat Iran

COL-002 · CLOUD / DATA SOVEREIGNTY

CLOUD Act 18 USC §2713 ↔ GDPR Art.48 + Charter Art.8

US global data access vs. EU data sovereignty

The CLOUD Act allows US authorities to demand data held on EU servers without EU legal process. GDPR Art. 48 prohibits such transfers without an EU legal basis or mutual legal assistance treaty. None exists for commercial cloud data. Compliance with one violates the other. Affects AWS, Azure, GCP, M365, and all US-based cloud providers.

HARD_BLOCK

BuGH Schrems II
C-311/18

COL-003 · FATCA / DATA PROTECTION

FATCA 26 USC §1471 ↔ GDPR Art.9 + Charter Art.8

Mandatory IRS reporting vs. special category data protection

FATCA requires EU banks to report US-person account data — including nationality and tax status — to the IRS. GDPR Art. 9 classifies this data as requiring explicit legal basis for cross-border transfer. EU banks systematically ignore the GDPR conflict because non-compliance with FATCA triggers a 30% withholding tax on US-sourced income.

HARD_BLOCK

EDPB Opinion
10/2020

COL-004 · FISA / TELECOMMUNICATIONS PRIVACY

FISA §702 / 50 USC §1881 ↔ German Basic Law Art.10

NSA mass surveillance vs. constitutional telecommunications privacy

FISA §702 permits NSA surveillance of EU persons using US-based services without individual judicial orders. The German Basic Law guarantees telecommunications privacy as a fundamental right (Art. 10 GG). Any transaction involving a US-based service provider that processes German communications falls into this collision field.

HARD_BLOCK

BVerfG
1 BvR 1619/17

COL-005 · SWISS BLOCKING / OFAC SECONDARY

Swiss Blocking Statute ↔ OFAC Secondary Sanctions

Swiss law prohibits compliance with extraterritorial US measures

Switzerland's Blocking Statute prohibits Swiss entities from complying with extraterritorial foreign measures that conflict with Swiss interests. OFAC secondary sanctions require compliance from entities with any US nexus. Swiss financial entities with US correspondent banking relationships face this collision in every sanctioned-jurisdiction transaction.

HARD_BLOCK

SR 946.202
Swiss BlockStat

COL-006 · EU AI ACT ART.5 PROHIBITIONS

EU AI Act Art.5 ↔ Charter Art.1 + Art.8

Transactions involving categorically prohibited AI systems

The EU AI Act Art. 5 establishes categorical prohibitions for certain AI applications — including social scoring by public authorities, real-time biometric surveillance in public spaces, and AI systems exploiting psychological vulnerabilities. Transactions involving entities that rely on prohibited AI systems for compliance, credit scoring, or AML screening receive a HARD_BLOCK.

HARD_BLOCK

EU AI Act Art.5
Reg. 2024/1689

COL-007 · AMLA 2024 SAR / PRESUMPTION OF INNOCENCE

AMLA 2024 SAR Obligation ↔ Charter Art.48 + Art.7

Mandatory SAR filing without evidence vs. presumption of innocence

AMLA 2024 requires banks to file Suspicious Activity Reports based on lower-threshold indicators, creating a de facto suspicion database without judicial oversight. The subject is never notified and has no right to object or rebut. The ECJ held in Schrems I (C-362/14) that mass data transfer without individual control is incompatible with the Charter. The SAR system is structurally identical.

HARD_BLOCK

BuGH C-362/14
Schrems I

DORA Art.45 ICT Relocation ↔ TFEU Art.63 Capital Movement

Compelled EU establishment vs. freedom of capital movement

DORA Art. 45 allows supervisory authorities to order Critical ICT Third-Party Providers to relocate operational activities to the EU. Art. 63 TFEU guarantees free movement of capital and freedom of establishment. A regulatory order to create an EU establishment under threat of market exclusion constitutes a compelled investment obligation that is structurally in tension with primary Treaty law.

HARD_BLOCK

TFEU Art.63
EUGH C-282/04

EAR / ITAR Export Control ↔ GDPR Art.25 Privacy by Design

US export control over PQC algorithms vs. GDPR state-of-the-art requirement

Post-quantum cryptography algorithms (ML-KEM, ML-DSA) are US-origin technology standardised by NIST. If the US Department of Commerce classifies PQC as export-controlled dual-use technology, every non-US institution using post-quantum cryptography would need an export licence. GDPR Art. 25 requires state-of-the-art cryptography. The two obligations will structurally conflict as PQC adoption increases.

HARD_BLOCK

15 CFR §730
EAR / BIS

5 FUNDAMENTAL_RIGHTS_HOLD Conditions — HOLD-001 to HOLD-005

HOLD conditions are not irresolvable — but they require human legal review before any transaction proceeds. The signed HOLD receipt documents the concern regardless of the ultimate decision.

NIS2 Art.32 Suspension ↔ Charter Art.41 Good Administration

Management suspension without prior hearing vs. right to good administration

NIS2 Art. 32 allows authorities to temporarily suspend a natural person in a management or representation role of a critical infrastructure operator without a prior hearing. Charter Art. 41(2)(a) guarantees every person the right to be heard before any adverse individual measure. This has not yet been litigated but will produce an ECJ referral when first applied at scale.

HOLD

Charter Art.41
NIS2 Art.32

GDPR Art.17 Right to Erasure ↔ AMLA 2024 / GwG §8 Retention

Right to be forgotten vs. mandatory 5-year AML record retention

GDPR gives data subjects the right to erasure of personal data. AMLA 2024 and the German GwG require AML records — including personal identification data — to be retained for five years. A bank that deletes AML data on a GDPR erasure request violates AMLD. A bank that refuses deletion violates GDPR. Both laws are binding. This structural conflict is unresolved and daily in practice.

HOLD

GDPR Art.17
GwG §8

CSRD Supply Chain Obligations ↔ Charter Art.20 Equality

De facto supply chain ESG obligations on legally exempt SMEs

CSRD formally exempts SMEs with fewer than 250 employees from sustainability reporting. But CSRD-obligated large companies must audit their supply chains against ESG standards — effectively imposing the same requirements on any SME supplier that wants to retain the contract. Legally exempt but economically captured. The structural inequality under Charter Art. 20 has not been addressed by the legislature.

HOLD

Charter Art.20
CSRD Art.29a

AI Act Annex III High-Risk ↔ Charter Art.16 + Art.52 Proportionality

Conformity assessment costs as a structural market access barrier

EU AI Act High-Risk conformity assessment costs €200,000–€500,000 per system. This creates a structural market entry barrier that favours large incumbents and effectively excludes small FinTechs from a market regulators say they want to improve through innovation. The burden is disproportionate under Charter Art. 52 proportionality requirements — a claim that will be litigated once the AI Act is fully in force.

HOLD

Charter Art.52
AI Act Annex III

DORA Art.28 Concentration Risk ↔ TFEU Art.101/102 Competition

Mandatory cloud diversification vs. EU competition law

DORA Art. 28 requires financial institutions to manage ICT concentration risk — allowing regulators to mandate diversification away from dominant cloud providers. This creates a scenario where regulators actively limit market share of specific providers, constituting a regulatory market distortion that may be structurally incompatible with TFEU Art. 101/102 prohibitions on anti-competitive market interventions.

HOLD

TFEU Art.101/102
DORA Art.28

The Four-Layer Architecture of Gate 0

Four concentric protection layers. Each layer reinforces the next. The core is cryptographically sealed at execution time and cannot be altered retroactively.



4 Constitutional Collision Register

14 coded norm collision fields across 53 jurisdictions · 9 HARD_BLOCK conditions · 5 FUNDAMENTAL_RIGHTS_HOLD conditions · Derived from binding judicial decisions · Machine-readable and fully deterministic

LAYER 4 · OUTER · COLLISION CATALOG

3 ECJ / BVerfG / ECHR Ruling Database

EUR-Lex · juris · HUDOC — primary sources · 200+ binding rulings indexed · Structured decision extraction with norm-reference mapping · Every collision field is traceable to a specific binding judicial decision

LAYER 3 · JURISPRUDENCE · BINDING SOURCES

2 Regulatory Change Radar

Automatic detection of new rulings and legislative changes · Push-integration into Collision Register · Norm-conflict assessment at every new precedent · New ECJ rulings integrated within 24 hours · Every update widens the gap to any competitor

LAYER 2 · DETECTION · <24H UPDATE CYCLE

1 Cryptographic Dual-Signature Core Seal

HMAC-SHA256 (classical — court-admissible today) + ML-DSA-65 / CRYSTALS-Dilithium / NIST FIPS 204 (post-quantum — verifiable in 2044) · Bi-temporal sealed: valid_time + transaction_time · Merkle-chained to artifact history · evidentiary_grade: true · expires_never: true

LAYER 1 · CORE SEAL · DUAL-SIGNATURE · POST-QUANTUM

// SECTION 06 — EXECUTION FLOW

How Gate 0 Executes — Five Steps in Under 200ms

Gate 0 runs before any sanctions check, before any AML screening, before any regulatory compliance assessment. It is the first gate in the pipeline and the only gate that checks primary law.

<p>01</p> <h4>INPUT RECEIVED</h4> <p>Transaction metadata received: entity, LEI, jurisdiction set, transaction type, NTP timestamp anchored immediately.</p>	<p>02</p> <h4>JURISDICTION MAPPING</h4> <p>All applicable jurisdictions identified from LEI registration, entity domicile, and transaction geography. Collision field lookup triggered for every jurisdiction pair.</p>	<p>03</p> <h4>COLLISION SCAN</h4> <p>14 collision fields evaluated against the jurisdiction set. Each field references the catalog version and ruling database version active at execution time.</p>	<p>04</p> <h4>VERDICT ASSIGNMENT</h4> <p>CLEAR, HOLD, or HARD_BLOCK assigned deterministically. No probability. No scoring. Binary output based on catalog state and jurisdiction match.</p>	<p>05</p> <h4>ARTIFACT SEALED</h4> <p>HMAC-SHA256 + ML-DSA-65 signature applied. Bi-temporal timestamps sealed. Merkle-chained to previous artifact. WORM-committed. evidentiary_grade: true. expires_never: true.</p>
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// SECTION 07 — REGULATORY ENFORCEMENT TIMELINE

When Each Collision Field Becomes an Enforcement Reality

Gate 0 is not a theoretical exercise. Each collision field corresponds to an active or imminent enforcement cycle that makes forensic documentation of primary law conflicts materially necessary.

- 2018 ● **CLOUD Act enacted (US) — COL-002 becomes active**

The CLOUD Act creates a structural conflict with GDPR Art. 48 for every EU institution using US-based cloud providers. No legal resolution exists. Institutions have been navigating this collision daily for eight years without documented primary law analysis.
- 2020 ● **EuGH Schrems II (C-311/18) — COL-002 / COL-003 confirmed**

The ECJ confirmed that FISA §702 mass surveillance is incompatible with the EU Charter. US-based data transfers without adequate protection are unlawful. Every institution that continued US cloud usage after Schrems II without a documented primary law assessment has an undocumented constitutional exposure.
- Jan 2025 ● **DORA applicable (17 January 2025) — COL-008 / HOLD-005 active**

DORA's ICT relocation powers (Art. 45) and concentration risk framework (Art. 28) are now in force. BaFin DORA examinations are producing findings in 2026. First enforcement actions will produce litigation that engages the TFEU Art. 63 and competition law tensions encoded in COL-008 and HOLD-005.
- Oct 2024 ● **NIS2 EU transposition deadline — HOLD-001 active**

NIS2 management suspension provisions (Art. 32) are now transposable law in all EU member states. The Charter Art. 41 right-to-good-administration conflict encoded in HOLD-001 will produce its first ECJ referral when Art. 32 suspension powers are applied at scale.
- Aug 2026 ● **EU AI Act most provisions applicable — COL-006 / HOLD-004 enforcement begins**

AI Act Art. 5 categorical prohibitions and Annex III High-Risk conformity requirements come into force for most systems. Institutions using AI-driven AML screening, credit scoring AI, or compliance AI must have conformity documentation. HOLD-004 proportionality challenge will be litigated within 18 months of first enforcement actions.
- 2027-28 ● **AMLA direct supervision begins — COL-007 litigation expected**

AMLA begins direct supervision of the 40 largest EU financial institutions. AMLA's SAR filing standards will be applied at institutional scale. The Charter Art. 48 presumption-of-innocence conflict encoded in COL-007 — analogous to the structure struck down in Schrems I — will produce ECJ referrals within the first supervision cycle.

// SECTION 08 — COMPETITIVE MOAT

What It Takes to Build What immo.quick Has Built

Gate 0 is not a software feature. It is a legal-technical construction that requires simultaneous mastery of international constitutional law, regulatory jurisprudence, and cryptographic infrastructure.

4-6

INTERNATIONAL CONSTITUTIONAL LAW SPECIALISTS

ECJ, BVerfG, ECHR jurisprudence · 53 jurisdictions · Active precedent monitoring

18-24

MONTHS TO REBUILD

<24h

NEW RULING INTEGRATION

Every new ECJ or BVerfG ruling integrated into the collision catalog within 24 hours — widening the gap daily

immo.quick is already operating. The chain is running. The collision catalog is growing. The jurisprudence database is updated daily. Every new ECJ ruling that immo.quick integrates in under 24 hours is a ruling that a competitor starting today has not integrated yet. The gap is structural. **It widens with every session of every court in every jurisdiction in the catalog.**