



SUPPLY CHAIN ANALYSIS & OPTIMIZATION ♦ SECURITY & COMPLIANCE

CORPORATE PROFILE

2026

Security as the byproduct of a well-run supply chain.

NAVIGATE

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01

OUR HERITAGE

Our Distinction

SIMS World Wide Inc. is a supply chain analysis and optimization company, through and through, with security and compliance built into the same discipline. Established in 2001, it originated as a derivative of the Logistics Modeling Center (LMCI) in Hampton, Virginia, a group that specialized in stochastic modeling and supply chain analysis for the United States military, with a particular focus on the Joint Strike Fighter program.

Following September 11, SIMS carried that defense-grade analytical discipline into the civilian world, serving private enterprise and government agencies including United States Customs and Border Protection. The founding idea never changed. A supply chain is the management of assets expressed in physical form, and security and compliance are not bolted onto that system but produced by running it well.

MILITARY

Modeling, simulation, and readiness engineering.

Lockheed Martin Honeywell USAF

GOVERNMENT

Program design, training, and policy advocacy.

U.S. CBP HMRC SUNAT Peru

PRIVATE SECTOR

Supply chain, compliance, and internal controls.

Disney KCSM GlaxoSmithKline

30+

YEARS

Of Excellence

24

YEARS

Pioneering AEO / CTPAT

6

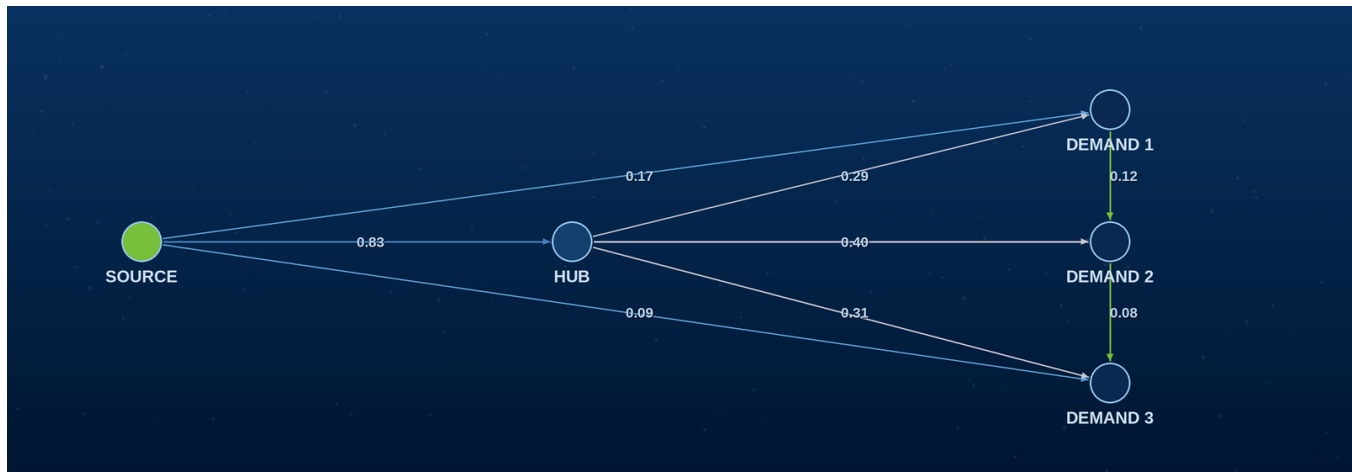
CONTINENTS

Global Reach

1,500+

CBP AUDITORS

Trained by SIMS



Discrete-event Monte-Carlo simulation of a stochastic logistics network

SIMS did not begin in customs. It began in applied mathematics, building discrete-event Monte-Carlo simulations of weapon-system readiness for the United States defense community, work in the lineage of the Air Force Logistics Composite Model.

The method is exact about uncertainty. Each component is characterized by its own stochastic failure process, drawn from empirical reliability distributions rather than point estimates, so a single run samples mean time between failures, repair times, and spares demand as random variables. Failures propagate into a network of maintenance tasks that compete for finite resources, modeled as queues. Thousands of independent replications yield not one answer but a distribution, with confidence intervals, for the quantity that matters, the sortie generation rate a fleet can sustain.

The discipline that mattered most was inverting the question. Fixing a required readiness target, the analysis solves backward through constraint optimization and sensitivity analysis for the spares, depot placement, and staffing that achieve it at least cost. Readiness was engineered from the mathematics of the supply chain itself, in support of programs of the first importance including the Joint Strike Fighter. When commercial enterprises posed the same class of question, SIMS answered with the same mathematics.

03

SEPTEMBER 2001

The Fragility Made Visible

The events of September 2001 made the stakes of that idea suddenly concrete. As the country absorbed the attacks, federal authorities sharply tightened inspection at the nation's more than three hundred ports of entry, by air, sea, land, and rail.

The economic consequence arrived within days, and from an unexpected direction. Automobile plants in Michigan began to shut down, not for want of demand but for want of imported parts that a just-in-time system had assumed would always arrive. The lesson was unmistakable. A modern supply chain is a tightly wound mechanism, and security imposed without regard to how it runs can cost as much as the threat it is meant to address.

300+

U.S. ports of entry tightened across air, sea, land, and rail

3 days

Until just-in-time auto plants began shutting for want of parts

2001

SIMS carries a supply chain argument to Washington

Working alongside Ed Kwas, a long-serving and widely respected veteran of United States Customs, the firm's principals were drawn into the central question of the hour, namely how to reopen the border, in what order, and on what basis of trust. The argument they carried to Washington was careful. To mandate physical security on the trade without a means of paying for it was to invite an unfunded mandate the trade would resist. There was a more durable path, one that followed the logic of commerce rather than the reflexes of enforcement.

Every supply chain shares a spine

Make-or-buy, sourcing, manufacture, movement, the border crossing, storage, and fulfillment.

Each milestone is a control

Business partner security maps onto vendor selection. Conveyance security maps onto the movement of goods.

Security through structure

The architecture asked of companies only what they were already, in their own interest, equipped to do.

04

A RECORD OF FIRSTS

From a Single Course to a Profession

What the agency needed, and quickly, was a training course, and its subject was unusual. It was the financial impact of supply chain security. SIMS built it and taught it over five days in Washington to an initial cohort of roughly twenty senior officers.

The curriculum began where few security courses would, with the income statement and the balance sheet, the cash conversion cycle, and the distinct financial signatures of different industries. Those first officers became the original validators, and their work shaped the role that matured into the Supply Chain Security Specialist.

1990s

Defense-Grade Origins

Stochastic modeling and readiness simulation for U.S. military programs, including the Joint Strike Fighter.

2001

The Birth of CTPAT

SIMS carries a supply chain economics argument to Washington as CTPAT is formed.

2003–14

Training the Trainers

Shaped the CBP Supply Chain Security Specialist role, trained the first validators, and delivered training to more than 1,500 CBP Regulatory Auditors, earning a rare CBP commendation.

2018–26

The Global Stage

Featured speaker at the WCO IT Conference every year, moderator in Vietnam (2023), and selected by the WCO and SIDA to design a Southern Africa custodial security pilot.

Present at the Formation

The point is not a claim of authorship. It is more durable than that. SIMS was present when the program was formed, helped translate a security mandate into language the trade could act upon, and trained a great many of the people who now administer that program and audit against it. To advise a company today on how a validator will think, or how an auditor will read its records, is to draw on the same well from which those professionals were taught.

05

THE DOCTRINE

The Architecture of Trade Integrity

SIMS reads every cross-border movement through two interacting planes. The regulatory plane defines what should happen. The evidentiary plane reconstructs what did happen. The difference between them is the signal.

LAW

Which obligations govern the movement?

ENTITY

Who is accountable, and in what role?

TRANSACTION

What event, declaration, or exchange occurred?

THE EVIDENTIARY PLANE

• Material

The physical movement of goods across modes, borders, and custody.

• Financial

The capital that moves with the cargo, read on the balance sheet.

• Information

The data that governs both, made immutable and verifiable.



When Law, Entity, and Transaction align with Material, Financial, and Information evidence, trade is congruent. Security and compliance are not added afterward; they emerge from a supply chain that can explain and prove itself.

What Is Behind the Dash

Those who followed the program closely recognize a detail at once. For its first years it was written C-TPAT, with a hyphen. When the program reached maturity its criteria were rewritten and strengthened, its identity was trademarked, and the hyphen was dropped.

~~C-TPAT~~ → CTPAT

The May 2019 Minimum Security Criteria update, the first comprehensive revision in the program's history, was developed with the trade through the COAC working group after more than eight hundred public comments.

The update reorganized the criteria into three focus areas and twelve criteria categories, added three new categories, separated every requirement into Musts and Shoulds, and for the first time paired the criteria with formal Implementation Guidance. Reading what is behind the dash is a reliable test of who has followed the program continuously, and SIMS trained the specialists who administer it.

I • Corporate Security

- 1 Security Vision and Responsibility
- 2 Risk Assessment
- 3 Business Partner Requirements
- 4 Cybersecurity

II • Transportation Security

- 5 Conveyance & IIT Security
- 6 Seal Security
- 7 Procedural Security
- 8 Agricultural Security

III • People & Physical

- 9 Physical Access Controls
- 10 Physical Security
- 11 Personnel Security
- 12 Security Training, Threat & Awareness

NEW The three categories shown in green were added in the May 2019 Minimum Security Criteria update, the program's first comprehensive revision.

SIMS possesses unparalleled expertise in supporting governments and companies with Authorized Economic Operator programs, drawing on more than two decades of pioneering experience in AEO and CTPAT since their inception.

► **For Governments**

- Design and implementation of AEO frameworks aligned with WCO standards
- Comprehensive training programs for customs officials
- Establishment of risk management protocols
- Deep command of the WCO AEO Compendium
- Mutual Recognition Agreement (MRA) support and negotiation

► **For Companies**

- End-to-end AEO and CTPAT certification readiness
- Supply chain security assessments and gap analysis
- Validation preparation and audit response
- Trusted-trader benefit optimization
- Continuous compliance and re-validation support
- Corporate and business-partner security training

FROM A NATIONAL PROGRAM TO AN INTERNATIONAL ARCHITECTURE

Three Pillars

Customs to customs, customs to business, and customs to other government agencies.

The AEO Concept

Partnership, security, authorization, technology, communication, and facilitation.

Mutual Recognition

A company validated in one jurisdiction can be recognized in another.

“

Security and facilitation are not opposing forces. They are complementary disciplines. The most secure supply chains are also the most efficient.

THE SIMS PRINCIPLE

SIMS applies operations research to the question that shaped its origins: how to achieve a required outcome with finite resources. Performance is optimized through three interdependent constraints, Time × Quality × Cost, and then tested against service, working capital, security, and throughput.

Quantitative Methodologies

- Discrete-event simulation and stochastic modeling
- Linear and non-linear optimization
- Constraint management analysis
- Total landed cost minimization
- Model verification and validation

Optimized Against

TIME Velocity, cycle time, and continuity

QUALITY Accuracy, condition, and conformance

COST Landed cost, cash conversion, and exposure

SOLVING THE INTERDEPENDENT COST TRADEOFFS AT ONCE



09

INTELLIGENCE & RISK

Data Analytics in Risk Management

SIMS begins with context: which law applies, which entity is accountable, and which transaction is under review. It then resolves exposure into Threat × Vulnerability × Consequence and designs the response through People × Process × Technology.

Threat

The intent and capability arrayed against the supply chain, internal and external.

Vulnerability

The gaps in partners, conveyances, processes, and data a threat can exploit.

Consequence

The material, financial, and reputational cost when an exposure is realized.

Risk Analytics Capabilities

- Risk assessment for maritime, air, and land cargo
- Profiling and targeting using data-driven insight
- Standardized risk assessment tooling and interdiction filters
- High-risk indicators and intelligence strategy

Mitigated Through

- People, the training and culture that carry the controls
- Process, the procedures that make security repeatable
- Technology, which amplifies judgment and never replaces it
- Proactive resource allocation ahead of the threat

A RISK MANAGEMENT SYSTEM THAT IS

Comprehensive

Scalable

Adaptable

Efficient

Effective

12
KEY FILTERS

International Engagements & Achievements



UNITED STATES

Present at the formation of CTPAT. Designed and delivered the CBP training, shaped the Supply Chain Security Specialist role, and trained 1,500+ CBP Regulatory Auditors. 14 consecutive years as the exclusive SCSS training partner.

SOUTHERN AFRICA ♦ WCO / SIDA

Selected to design, manage, and execute one of the first AEO and cargo-security pilots of its kind in Southern Africa (2024), supported by the Government of Sweden.

MEXICO & UK ♦ CUSTOMS

Engagements spanning Mexican Customs and HMRC, extending the trusted-trader model across mutual-recognition partners.

PERU ♦ SUNAT

Critical assistance to SUNAT in the Superior Custodial Control Pilot. Formal recognition from the national authority, with elements of the work incorporated into Peruvian law.

VIETNAM ♦ WCO IT

Conference moderator at the WCO IT Conference (2023), with high-profile press engagement on customs modernization.

GLOBAL ♦ WCO PLATFORM

Continuous featured speaker at the WCO IT Conference from 2018 through 2026 and the WCO AEO Global Conference.

ACCOLADES & RECOGNITION

- ★ Letters of Commendation from U.S. CBP and SUNAT, Peru
- ★ Elements of SIMS custodial control work incorporated into Peruvian law
- ★ Selected to design one of the first AEO and cargo-security pilots of its kind in Southern Africa (WCO / SIDA)

Customs Regulatory Compliance Excellence

For over two decades SIMS has been a trusted provider of comprehensive customs regulatory compliance services, integrating detailed risk analysis, customized strategy, and hands-on implementation across the full lifecycle of an entry.

Classification & Valuation

- Expert HTS classification
- Tariff engineering for lawful savings
- Customs valuation and country of origin
- Binding ruling strategy

Duty Optimization

- Duty exposure analysis
- FTA qualification (USMCA, CAFTA)
- Duty drawback and FTZ strategy
- Export controls

Audit & Disclosure

- Focused Assessment and QRA preparation
- Prior disclosure and voluntary self-disclosure
- Penalty mitigation, protest, and appeal
- Post-audit remediation and internal controls

Internal-Controls Backbone

- Control environment and risk assessment
- Control activities and monitoring
- Information and communication
- COSO-aligned governance

Regulatory compliance is not a cost center. It is a business optimization strategy that creates competitive advantage.

THE SIMS PRINCIPLE

Navigating the Enforcement Landscape

CBP says it upholds approximately 500 U.S. trade laws for 49 partner government agencies. Executive Order 14411 sharpens the entity question by directing changes to importer eligibility, good standing, registry maintenance, risk tiers, and recurrent vetting. SIMS connects the applicable law, accountable entity, and transaction to defensible controls.

Tariffs & Trade Remedies

Shifting tariff schedules, safeguard and antidumping duties, and exemption regimes. SIMS monitors the landscape and structures lawful, defensible mitigation.

Trade-Fraud Exposure

Expanding civil and criminal liability reaching down the supply chain. SIMS builds the records and internal controls that withstand scrutiny.

Origin Integrity & Transshipment

Verified country of origin is a frontline test. SIMS binds material, financial, and information flows so origin claims hold up under scrutiny.

Importer Accountability

EO 14411 elevates identity, ownership, affiliations, bonding, compliance history, and good standing in IOR risk.

Duty Recovery

Where duties were overpaid, SIMS prepares the declarations and entry audits that recover them through the lawful refund and protest channels.

Forced Labor & Traceability

Forced-labor import bans demand traceability several tiers deep. SIMS maps partners and evidences admissibility across the chain.

Mitigation as a Discipline

SIMS does not meet the moment by trading in alarm. It meets it with quantitative discipline, financial fluency, and the doctrinal memory of a program it helped to shape, redesigning the operation so that compliance becomes, once again, the byproduct of running it well.

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STRATEGIC VALUE

Engineered Outcomes

SIMS delivers engineered outcomes that demonstrate security, speed, and economic performance are not trade-offs but optimized system results.

Zero-Trust by Design

Verifiable, zero-trust system design that ensures integrity at every touchpoint.

Engineered Outcomes

Security, speed, and performance delivered as optimized outcomes, not competing trade-offs.

Immutable Corridors

Corridors secured end to end, with custody and data made tamper-evident and verifiable.

FINANCIAL PERFORMANCE METRICS

Cash Conversion Cycle

Optimizing time from expenditure to revenue realization

Working Capital Investment

Minimizing capital tied up in operations

Total Landed Cost

Full cost visibility across the supply chain

REPRESENTATIVE INDUSTRIES SERVED

SIMS serves clients across virtually every vertical. Representative industries include, and are not limited to:

▪ Pharmaceuticals & Life Sciences	▪ Automotive & Transportation	▪ Electronics & High-Technology
▪ Agricultural Products & Food	▪ Textiles & Apparel	▪ Industrial Machinery
▪ Energy & Extractives	▪ Consumer Products & Retail	▪ Aerospace, Defense & more

SIMS is at the forefront of deploying advanced technology across logistics and the supply chain, unifying Port Community Systems, single windows, and legacy customs systems into coherent, intelligent operations.

Security Technologies

- Tamper-evident seals with 2D coding, Bluetooth, GPS
- NII imaging with machine-learning analysis
- AI-driven risk detection and targeting
- Intelligent cameras with deep-learning analytics
- Drone technology including LiDAR and multispectral imaging
- Chain-of-custody programs and cargo-theft investigation

Data & Integration Systems

- Distributed ledger and immutable records
- Port Community System and single-window integration
- Legacy customs system modernization
- Real-time monitoring and analytics
- Interoperability across trade stakeholders

► Immutability & Supply Chain Integrity

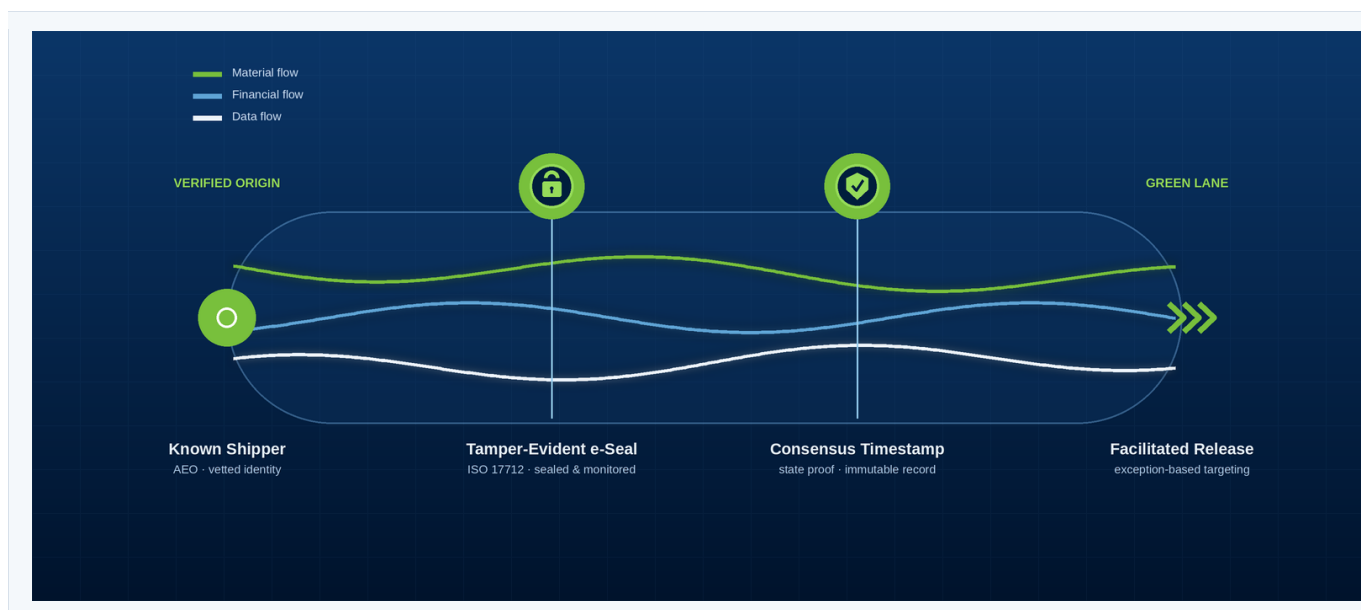
A cornerstone of our integration approach is the principle of immutability, ensuring data remains secure and unalterable. SIMS incorporates distributed ledger technology, AI-driven analytics, and real-time monitoring so every transaction is recorded with the highest accuracy and security, and trust is engineered into the system rather than assumed.

People. Process. Then Technology. Systems serve strategy, not the reverse. Technology amplifies human capability, it never replaces human judgment.

THE SIMS PRINCIPLE

Securing Digital Trade Corridors

SIMS secures corridors by joining two planes. Law × Entity × Transaction defines the expected context. Material × Financial × Information preserves what actually occurred. When the two agree, or every legitimate variance is explained, the corridor operates on evidence rather than assumption.



Verifiable Truth

Context and evidence remain aligned across every authorized handoff.

OUTBOUND VISIBILITY

An export is verified to be a true import, purchase order to point of delivery.

INBOUND VISIBILITY

Full customs visibility on what is arriving, before it arrives.

PROVENANCE & ACCOUNTABILITY

Origin, condition, and accountability of goods and data, established and preserved.

► Immutable material, financial, and data flow

► A scalable border of the future

► The highest level of security and facilitation

From Immutable Records to Intelligent Targeting

Targeting begins with a model of normal trade. Law, Entity, and Transaction define the Expected Path; Material, Financial, and Information reconstruct the Actual Path. Their difference is variance, the finite set of exceptions SIMS classifies, prices, and routes for action.

Expected Path

LAW Applicable requirements

ENTITY Known parties and authorized roles

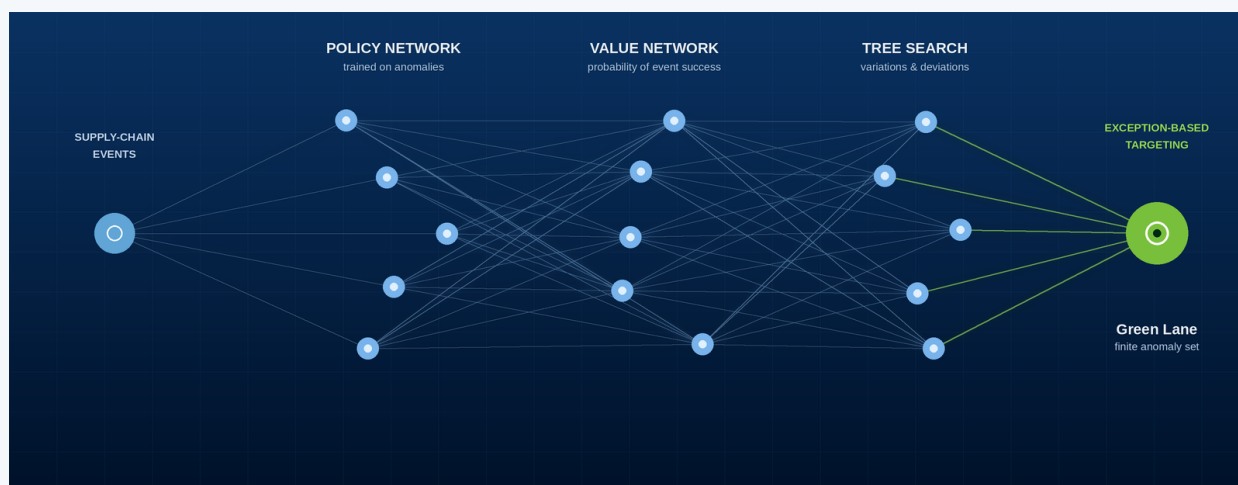
TRANSACTION Normal route, value, origin, and custody

Actual Path

MATERIAL Cargo and custody events

FINANCIAL Payments, duties, and incentives

INFORMATION Declarations and system records



VARIANCE TARGETED BY EXCEPTION

Valuation & Classification

A change of HTS code that shifts declared value.

Seal & Material Integrity

Material-flow incursion and tamper-evident seal events.

Diverted Destination

A change of routing or destination for nefarious reasons.

Quantity Discrepancy

Unexplained changes to piece counts and weights.

CONGRUENT
FACILITATE

DYNAMIC
VALIDATE

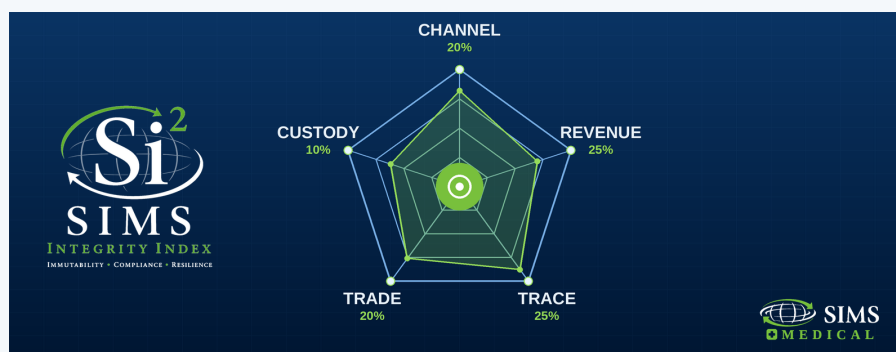
INCONGRUENT
INTERVENE

17

A PROPRIETARY DISCIPLINE

The SIMS Integrity Index

The SIMS Integrity Index turns the architecture into a measurable discipline. It compares the expected path of each product, shipment, and transaction with the actual path, classifies variance across five dimensions, and quantifies the financial and operational exposure.



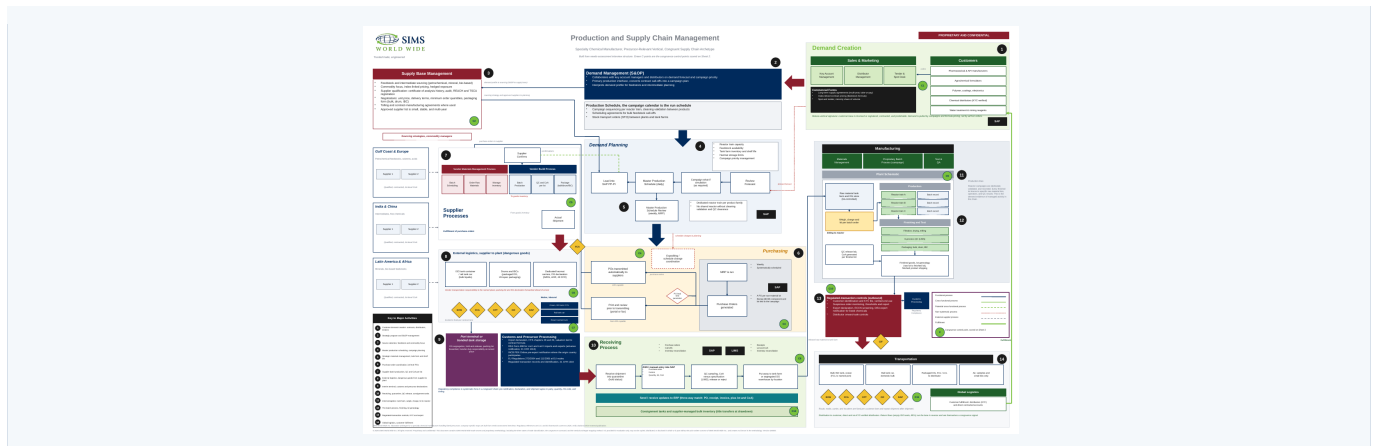
01 Channel 20%	Is the product in the authorized channel? Compares authorized against actual pathway; flags wrong market, wrong customer, price, and diversion.
02 Revenue 25%	Did we receive the money we were entitled to, and pay only what we owed? Recovers rebate and fee leakage, overpaid duty, and lost margin.
03 Trace 25%	Does product movement match reported sales? Reconciles bill-to against ship-to to the exact break point, with lot numbers. THE DIFFERENTIATOR
04 Trade 20%	Did product cross the border through the right party, rules, and documents? Tests importer of record, classification, origin, brokers, and CTPAT readiness.
05 Custody 10%	While it was moving, did we keep control of it, and can we prove it? Seal and custody evidence ensure no unverified product reaches the patient.

Congruent trade is facilitated. Dynamic trade is validated. Incongruent trade is escalated for proportionate intervention. A green score is evidence of congruence, not a guarantee of regulatory treatment; the method is delivered and the scoring platform is in build.

0–69 ACTION REQUIRED	70–89 MONITOR	90–100 CONTROLLED
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Congruent Trade: The Archetype and the Three States

Mature verticals run very specific, highly managed supply chains because the product, the regulation, and the capital demand it. SIMS draws that authorized operating baseline as a vertical supply chain archetype map, built by hand from needs-assessment interviews since 2001: fourteen activities, the systems that record them, the Incoterms and modes at every handoff, and the control points a legitimate operator maintains without thinking about it. With Law $\times$ Entity $\times$ Transaction it is the expected path; the three flows reconstruct the actual path; the variance places any lane in one of three states.



I Congruent FACILITATE

Documents match cargo, value matches the contract formula and the market, the route is commercially optimal, parties are known and licensed, volumes follow production cadence. The calibrated baseline. Cleared, with enforcement resources spent elsewhere.

II Dynamic VALIDATE

Real, explainable change under validation: a new supplier after audit, a seasonal spike, a rerouting around a closed port. Not suspicious by definition, and exactly where sophisticated actors camouflage, so the reason on record is what is tested.

III Incongruent INTERVENE

A mismatch that cannot be resolved across the three flows: party, quantity, route, and money disagree, mass balance does not close, trade does not fund itself. Not proof of illegality; an unresolved variance escalated for proportionate intervention.

Context defines the expected path. Evidence reconstructs the actual path. Variance determines state. State determines response. The same archetype that clears a congruent lane is what an incongruent lane is measured against.

INCONGRUENT
INTERVENE

DYNAMIC
VALIDATE

CONGRUENT
FACILITATE

The SIMS Philosophy

Client Relationship Management

We prioritize a consultative, client-focused approach over traditional marketing. Our high client-retention rates reflect the effectiveness of our project plans and delivery metrics. Our team draws top-tier experts from shipping, military, governmental, and international trade sectors.

Commitment to Innovation & Excellence

SIMS World Wide's history of excellence, extensive international engagements, and methodological rigor have established us as a leading force in global supply chain management and trade security. As the landscape evolves, we remain steadfast in our commitment to innovation and excellence.

THE SIMS FOUNDATION

Transform data into wisdom
Integrate the three flows
Turn compliance into competitive advantage

Align people, process, and technology
Build trust through results
Deliver excellence, without exception

“

Assumed trust is not scalable. Verifiable truth is engineered at every touchpoint, tested at every transaction, and maintained through evidence.

THE SIMS PRINCIPLE

AN INVITATION TO BEGIN

Every engagement begins with a conversation. We would be glad to learn your constraints, understand your objective function, and follow the architecture with you from context through response: the law, entity, and transaction that define your expected path, the evidence that reconstructs the actual one, and the proportionate response that follows. Tell us what you are optimizing for.

CONNECT WITH US

Let's engineer your next advantage.

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