

MCP SERVER

NO CODE

CLOUD HOSTED

Incoterms 2020 Cost & Risk Calculator MCP for AI Agents

Determining International Shipping Costs and Compliance

The Incoterms 2020 Cost & Risk Calculator MCP instantly determines the full cost breakdown, risk transfer points, and legal responsibilities for any international shipment using the official Incoterms rules. Stop arguing over who pays customs duties or when the goods legally change hands. This tool gives you a clear matrix of accountability for every leg of your global supply chain.

A+ Quality Score 100/100

incoterms

shipping

logistics-cost

international-trade

customs



The connectivity layer between AI and the world's software.



Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

Your AI Connections Run Through Vinkius Cloud

The world's largest
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.

— Architecture principle

Four Pillars of the Vinkius Runtime

01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

AES-256

Encryption at rest

Ed25519

PKI vault signatures

24h TTL

Ephemeral session keys

V8 Isolate

Sandboxed execution

One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

MCP ENDPOINT

`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

01 — Ed25519 PKI Vault

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

02 — V8 Isolate Sandboxing

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

03 — SSRF Guard

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

05 — Cryptographic Audit Trail

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

04 — DLP & PII Redaction

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

06 — Honeypot Trap System

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

Emergency Kill Switch

EU AI Act Art. 14(1)
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

01 — Server deactivated

The MCP server is immediately taken offline across the entire cluster.

02 — All tokens revoked

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

03 — WebSocket connections killed

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

Control Plane

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

FinOps

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

Firewall & DLP

PII redaction activity, sensitive data protection counters, and security event timeline.

Agent Activity

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

Tool Health

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

Incident Log

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at cloud.vinkius.com — connect your AI agent in under 60 seconds.

Incoterms 2020 Cost & Risk Calculator MCP

3 tools available
Cloud-hosted on Vinkius

When shipping internationally, knowing exactly who is responsible for what—and how that affects costs and risk exposure—can feel like navigating a legal minefield. This MCP cuts through the ambiguity. It precisely calculates logistics expenses and maps out where financial responsibility shifts based on the Incoterms 2020 rules you use.

Instead of relying on complex spreadsheets or vague emails, your agent uses this tool to pull up a clear breakdown showing total costs for both the seller and buyer, including freight, insurance, and duties. You can compare risk transfer points between terms like FOB and DDP instantly. Plus, it generates a full responsibility matrix, telling you exactly which party handles export clearance or loading at various points in transit. By connecting this to your workflow through Vinkius, you get a single source of truth for global trade documentation that saves hours of manual review.

Core Capabilities

01 — Calculate Total Shipping Costs

Determines the total financial breakdown, including freight, insurance, and duties, for any specified Incoterm.

02 — Compare Risk Transfer Points

Analyzes and compares where legal risk shifts between different shipping terms (e.g., comparing FOB to DDP).

03 — Map Out Responsibilities

Generates a detailed matrix showing which party is accountable for specific logistics tasks, like export clearance.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/mcp/incoterms-2020-cost-risk-calculator — connect your AI agent in three steps.

- 01** First, provide the MCP with your desired Incoterm (e.g., CIF, EXW) and the shipment details.
- 02** The tool processes this data by cross-referencing the official Incoterms 2020 guidelines to calculate costs or map responsibilities.
- 03** You get back a precise breakdown: either a cost ledger, a risk comparison graph, or a task matrix detailing party accountability.

The bottom line is that you move from guessing the legal hand-off points and paying unexpected fees to having an immediate, accurate accounting of global logistics obligations.

Built For

This MCP is essential for anyone managing international supply chains or trade compliance. If your job involves cross-border shipping, you're constantly dealing with complex questions about who pays customs and when risk transfers. It's built for the logistics professional tired of arguing over documentation details.

Logistics Manager

Uses this tool to vet new carrier agreements by calculating potential cost breakdowns and verifying which Incoterm minimizes their financial exposure.

Trade Compliance Analyst

Checks the responsibility matrix to ensure all necessary documentation, like export clearance, is assigned correctly before shipments leave port.

Supply Chain Coordinator

Compares risk exposure between different Incoterms terms (like CIF vs. FOB) to recommend the most secure shipping option for a client.

What Changes When You Connect

- 01** Clarity on expenses: Use `calculate_cost_breakdown` to get a single, reliable figure showing the full cost contribution from freight, insurance, and duties.

-
- 02** Risk mitigation: Compare risk exposure by running through `compare_risk_exposure` , allowing you to pick the Incoterm that best protects your company's interests.
-
- 03** Compliance assurance: Generating a responsibility matrix with `get_responsibility_matrix` ensures no critical task, like export clearance, falls into an accountability gap.
-
- 04** Time savings: Instead of cross-referencing multiple industry guides for cost and liability rules, you get the answer in seconds through your AI client.
-
- 05** Decision certainty: You move past 'best guess' shipping terms. This MCP gives you quantifiable data to justify your choice to stakeholders.
-

Real-World Applications

Client asks for cost comparison between two ports

A client needs to ship goods from Shanghai to Rotterdam but is unsure if CIF or FOB will be cheaper. Your agent uses `calculate_cost_breakdown` twice, running both terms and presenting a direct financial comparison, showing the exact difference in total landed costs.

Selecting optimal risk transfer point

Your team needs to ship high-value goods across multiple jurisdictions. The agent uses `compare_risk_exposure` to visually map out where the legal liability transfers, helping you select the term that minimizes your company's exposure until arrival.

Assessing liability for customs delays

A shipment got held up at customs. You need to know if your company or the buyer was responsible. Your agent runs `get_responsibility_matrix` for the specific Incoterm, instantly pointing out who owns the clearance documentation and associated fees.

Patterns to Avoid

Confusing Incoterms with payment terms

X AVOID

Assuming that because a contract specifies 'Payment upon Delivery,' the risk transfer point is automatically handled. This ignores crucial physical logistics steps.

✓ INSTEAD

Always use the MCP to generate a responsibility matrix (``get_responsibility_matrix``). This verifies who handles export clearance and loading, regardless of when payment is due.

Ignoring local customs rules

X AVOID

Just calculating only freight costs without accounting for duties. You end up underestimating the total landed cost by thousands.

✓ INSTEAD

Use ``calculate_cost_breakdown`` to ensure you include duties and insurance in the breakdown. This gives a truer picture of the final expenses.

The Right Fit

Use this MCP if your primary pain point is ambiguity over who pays or when risk transfers during global shipping. It's perfect for verifying contractual logistics terms against real-world financial and legal rules. Don't use it, however, if you simply need to write a general contract clause; the tool calculates based on established standards. If your problem is internal process management—like optimizing warehouse layout or updating CRM records—you need a different type of AI integration.

Incoterms 2020 Cost & Risk Calculator for International Logistics Compliance

Today, determining the true cost and legal transfer points in international shipping is a nightmare. You spend hours clicking through customs tariffs, comparing insurance policies, and cross-referencing multiple guides just to figure out if

With this MCP, that manual headache vanishes. Your AI agent handles the comparison instantly. It processes all variables—freight, duties, risk location—and spits out a clear cost breakdown

your shipment needs specialized export clearance or who writes the check for duties.

and responsibility map. You get actionable data instead of confusing PDFs.

Incoterms 2020 Cost & Risk Calculator for Global Supply Chain Visibility

The tedious steps go away: you no longer have to manually compare risk exposure between terms like FOB and DDP, nor do you have to guess who handles the complex paperwork for export clearance. The system maps it out automatically.

Now, when a shipment is booked, your agent provides an immediate, authoritative summary of costs, risks, and responsibilities. It's definitive.

Incoterms 2020 Cost & Risk Calculator: 3 Tools for International Trade

Use these tools to calculate cost breakdowns, compare risk exposure across different terms, and map out legal responsibilities using Incoterms.

#	TOOL	DESCRIPTION
01	<code>calculate_cost_breakdown</code>	Calculates the full cost breakdown, including freight, insurance, and duties, for any specific Incoterm.
02	<code>compare_risk_exposure</code>	Compares risk transfer points between multiple specified Incoterms terms like FOB or DDP.
03	<code>get_responsibility_matrix</code>	Generates a detailed matrix that shows which party is responsible for key tasks under any given Incoterm.

See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

U What are the total landed costs for goods shipped from Miami to London using DDP?



Incoterm Analysis: DDP (Delivered Duty Paid)

COMPONENT	SELLER COST ESTIMATE
Goods Value	\$15,000
Freight & Insurance	\$950
Duties/Taxes	\$320
Total Estimated Cost	\$16,270

The risk transfers to you only once the goods arrive at your specified destination in London. This covers all duties and taxes upfront.

U Compare the legal risk transfer points for CIF vs FOB shipments.



Risk Exposure Comparison: CIF vs. FOB

- **FOB (Free On Board):** Risk transfers when goods are loaded onto the vessel at the port of shipment. The seller's responsibility ends there.
- **CIF (Cost, Insurance and Freight):** Risk transfers only after the goods are safely on board the vessel. However, the seller must arrange insurance up to destination, giving you more coverage initially.

U Who handles export clearance if we use EXW terms?



Responsibility Matrix: EXW (Ex Works)

Under EXW, the responsibility for nearly everything falls on the buyer. Specifically:

- **Export Clearance:** Buyer is responsible.
- **Local Loading/Documentation:** Buyer handles all tasks at the seller's premises.

This means you need to manage local permits and paperwork yourself from day one.

Frequently Asked Questions

01 How does the cost breakdown calculation work?

The `calculate_cost_breakdown` tool uses the selected Incoterm to allocate expenses like freight, insurance, and duties to either the seller or the buyer.

02 Can I compare multiple Incoterms at once?

Yes, you can use the `compare_risk_exposure` tool by providing a list of Incoterm codes to see how risk transfer points differ.

03 Does the tool cover customs responsibilities?







Yes, the `get_responsibility_matrix` tool provides a detailed breakdown of which party is responsible for tasks like export and import clearance.

Go Live in 60 Seconds

Get your connection token from cloud.vinkius.com, then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

```
https://edge.vinkius.com/[TOKEN]/mcp
```

CLIENT	WHERE TO CONFIGURE
 Claude AI	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 Cursor	Settings → Features → MCP Servers → "+ Add New MCP Server" → Type: SSE → Paste endpoint
 VS Code	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"incoterms-2020-cost-risk-calculator": { "url": "..." }</code>
 Windsurf	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 ChatGPT	Settings → Tools & plugins → Add MCP server → Paste endpoint
 Gemini	Extensions → Add MCP Server → Paste endpoint URL

ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  **Ask ChatGPT** 
-  **Ask Claude** 
-  **Ask Perplexity** 
-  **Ask Gemini** 
-  **Ask Grok** 

READY TO CONNECT

Incoterms 2020 Cost & Risk Calculator is live on Vinkius Cloud.

Get your connection token, paste it into your AI agent, and
start building. No SDK. No deployment. Just results.

[Start at cloud.vinkius.com](https://cloud.vinkius.com) →

vinkius.com · support@vinkius.com

INDEPENDENT PLATFORM DISCLAIMER

Vinkius is an independent platform and is not affiliated with, endorsed by, sponsored by, verified by, or otherwise authorized by Incoterms 2020 Cost & Risk Calculator. All third-party trademarks, logos, and brand names are the property of their respective owners. Their use in this document is strictly for informational purposes to identify service compatibility and interoperability.

DOCUMENT INFORMATION

Generated	June 2026
MCP Server	Incoterms 2020 Cost & Risk Calculator MCP
Server ID	019f14da-4aa8-7268-9e1e-fb578ded9024
Platform	Vinkius Cloud for AI Agents
Endpoint	https://edge.vinkius.com/{token}/mcp

LICENSE & USAGE

This document is generated automatically by the Vinkius PDF Engine. Content reflects the MCP server configuration at the time of generation and may change as updates are deployed. For the most current information, visit vinkius.com/mcp/incoterms-2020-cost-risk-calculator.