



REQUEST FOR INFORMATION (RFI)

Real-Time Anomaly Detection

RFI NUMBER: RFI 01-2025/2026

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Email submission to: pmkhungo@itac.org.za and ksetshogwe@itac.org.za

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1. Purpose

This Request for Information (RFI) invites market input from suitably qualified suppliers on solutions, approaches, and implementation roadmaps for real-time anomaly detection on external data, combined with rule-based monitoring and decision support dashboards. This RFI is not a solicitation for bids and does not form part of a competitive evaluation.

Responses will be used to:

- Validate problem framing, use cases, and outcomes.
- Understand feasible target architectures and the integration required with external data sources.
- Survey available AI/ML, rules engines, applicable models, and analytics capabilities that best fit ITAC's mandate.
- Provide estimates of cost ranges and models, delivery timelines, required skills, governance, risks, and compliance requirements applicable in public service.
- Inform the Terms of Reference (ToR) for potential future procurement.

2. About ITAC

2.1 Establishment of the International Trade Administration Commission (ITAC)

The International Trade Administration Commission (ITAC) was established in terms of Section 7 of International Trade Administration Act, 2002 (Act No. 71 of 2002). ITAC was established with its own offices located in Tshwane, Sunnyside at *the dtic* campus in 2003. The current organizational structure provides for the employment of the 131 employees. The said structure consists of Senior Management Service (SMS); Middle Management Service (MMS) and other employees.

2.2 ITAC's Key Strategic Objectives

To achieve its aims, ITAC has identified the following three key strategic objectives to guide its operations, namely to:

- 2.2.1 Promote industrialization.
- 2.2.2 Promote transformation.

- 2.2.3 Conduct distributional impact assessments of trade measures affecting consumers' welfare and downstream industries.
- 2.2.4 Ensure efficient administration of trade instruments (customs tariff investigations, trade remedies, import and export control).
- 2.2.5 Monitoring, evaluation and modernization of administrative and operational processes.
- 2.2.6 Conduct distributional impact assessments of trade measures affecting consumers' welfare and downstream industries.

2.3 Functional Areas of ITAC

There are two main functional areas of ITAC with supporting business units reporting there under, namely:

2.3.1 Core business

- Tariff Investigations.
- Trade Remedies.
- Import and Export Control.

2.3.2 Business Support Services

- Human Resources.
- Finance & Supply Chain Management.
- Communication Services.
- Information Technology.
- Internal Audit services.
- Legal Services.
- Policy and Research.
- Secretariat.
- Risk Management.

2.3.3 The Commission of ITAC

As compared to the other public entities in South Africa, ITAC has no Board of Directors but a Commission. The membership of the Commission is comprised as follows:

- Full time Chief Commissioner (CEO of ITAC).
- Full time Deputy Chief Commissioner.
- Part-time Commissioners (up to 10).

3. Context

ITAC administers South Africa's trade policy instruments (tariffs, trade remedies, import/export control) and requires timely, trustworthy insight into trade flows at the tariff-heading level to protect the domestic market and support industrial policy.

ITAC receives sensitive Bill of Entry (BOE) data from SARS, facilitated through memorandum of understanding.

Our analysts currently spend significant effort preparing data before any analysis can begin. ITAC aims to reduce manual data preparation, encode business rules, and apply AI/ML to flag price, volume, classification, circumvention, and anomalies across $\pm 4,000$ tariff headings in near real-time.

ITAC is currently embarking on a multi-year project to modernize our permit system which in our view will complement the Anomaly Detection tool to cross-check each BOE against the permit records to help eliminate false positives and finds real breaches such as permit overuse, incorrect declarations and expired permit.

4. Project objective

- 4.1 Gather information that can ingest BOE data, apply business rules, and run AI/ML-based anomaly detection as well as provide reporting dashboards to support decision making.
- 4.2 Identify best-practice approaches for data quality automation and human-in-the-loop workflows to improve model precision over time.
- 4.3 Comply with security, privacy, POPIA, South Africa data residency, and auditability.
- 4.4 Spell out configuration & integration plans, skills transfer, and operating models to ensure long term sustainability of the solution.
- 4.5 Obtain indicative licensing, consumption costs, delivery timelines, and risk areas.

5. Scope of Information Requested (the list is not exhaustive)

Suppliers are requested to provide information on:

- 5.1 Solution overview & target architecture (data ingestion, processing, storage, AI/ML models, alerting, Business Intelligence /visualization).
- 5.2 Integration approach with external data sources.
- 5.3 Data quality automation such as standardization, validation, deduplication, anomaly prescreening before deeper analysis.
- 5.4 Detection using AI/ML for price/volume anomalies, misclassification, circumvention across tariff headings, and other intel that can be drawn from the BEO data.
- 5.5 Each alert must explain why it fired, allow analyst feedback (relevant/not relevant) that teaches the system.
- 5.6 Apply security, privacy, audit logging, and access control.
- 5.7 Implementation roadmap, change management, training & skills transfer.
- 5.8 Licensing, implementation, support, managed services, proof of concept
- 5.9 Supplier credentials, references, and comparable implementations.
- 5.10 Provide a sample SLA.

6. Problem Statement

ITAC's job is to help keep trade fair and support local industry. To do that well, we need to spot unusual import/export activity quickly and consistently, then act on it with confidence.

We receive detailed shipment records from SARS called Bills of Entry (BOE). It tells us what came in, how much, its price, where it came from, and which Tariff code it falls under. There are thousands of Tariff codes and a flow of new entries every day. Our experts currently spend a lot of time cleaning and preparing this data before they can even start looking for problems. Important patterns can be missed or seen too late.

Examples of problems we need to find include:

- a) **Odd prices:** Example, a product suddenly arriving far cheaper than usual.
- b) **Sudden volume changes:** Unusual big spikes or drops.
- c) **Misclassification:** Goods moved to a nearby Tariff code to avoid the proper duty.
- d) **Permit mismatches:** (entries that don't match the permit's code, dates, or quantities).

Manually monitoring this across thousands of codes is not realistic. We need a solution that can automate the routine checking, apply business rules we define and spot unusual patterns that rules might miss and alert the right people. When an alert is flagged, staff should be able to click through see the relevant permit information immediately.

7. Disclaimer

Whilst the intent of the International Trade Administration Commission of South Africa (ITAC) in issuing this Request for Information (RFI) is to compare vendor responses and conduct market research on "Real-Time Anomaly Detection," ITAC is under no obligation or commitment whatsoever to:

- Initiate a formal tender process.
- Accept any information, proposal, or submission received in response to this RFI.
- Include any responding vendor in a future tender or procurement process.
- Enter into, or form, any contractual or other binding commitment with any supplier in relation to "Real-Time Anomaly Detection."

8. Estimate Costing

Solution Offering	Cost Estimate
Costing proposals for Real-Time Anomaly Detection solution	
VAT	
Total Cost	

9. RFI PROPOSAL SUBMISSION

RFI No: RFI 01-2025/2026

Description: REQUEST FOR INFORMATION ITAC REAL TIME ANOMALY DETECTION FOR THE INTERNATIONAL TRADE ADMINISTRATION COMMISSION OF SA.

Closing date and time: 12 December 2025 at 11h00

The RFI Proposal must be directed to pmkhungo@itac.org.za and ksetshogwe@itac.org.za.

10. Enquiries

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