

## Electronic Cargo Tracking System for Revenue Authorities

From Improved Security to Increased Safety and  
Quicker Turn-around Times at the Port with Cargo  
Tracking System



# Electronic Cargo Tracking System for Revenue Authorities

## Customer Profile

TRA consists of three revenue departments, Value Added Tax (VAT), Income Tax and Customs and Excise Departments, responsible for mobilizing revenue through administration of the respective tax laws. Major functions of TRA are to assess, collect & account for Government revenue; administer all the revenue laws of Central Government; advise the Government on fiscal policy; promote voluntary tax compliance; improve the quality of services to tax payers; minimize tax evasion and produce trade statistics & publications.

## Business Situation

Tanzania Revenue Authority (TRA) is responsible for administering various taxes of the central government. Among its activities is to control all the transit cargo that enters the port of Dar Es' Salaam and transits through Tanzania to the surrounding landlocked countries of Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda. As one of the largest ports in the region thousands of goods move through the port to various border stations each week. TRA was experiencing significant revenue leakage because goods were dumped in the country while declared as transit goods to avoid taxation. TRA wanted to implement a tracking system:

- To stop revenue leakage and identify dumping
- Maximize revenue collection
- Track goods from point of entry to point of exit
- Provide seamless capability to integrate with existing customs systems

## Solution

Techno Brain was approached by TRA for implementation of the required Tracking System. Techno Brain deployed an Electronic Cargo Tracking System at TRA that dovetailed with existing customs systems. This was to enable TRA customs officers to link all the transit cargo movements to the cargo registration numbers issued by the TRA customs system.

### Major features of Electronic Cargo Tracking System:

- A breach in the declared route of the cargo raises an alarm
- Time limits can be configured so if the cargo stops for more than the allocated time an alarm is triggered
- If the electronic seal is damaged an alarm is raised
- If the battery in the tracking devices runs out of charge the system raises alarm

### Customer:

Tanzania Revenue Authority (TRA) is a semi-autonomous agency of Tanzania Government, responsible for administering the tax laws and managing the assessment, collection and accounting of the Central Government taxes as well as several non-tax revenues.

### Industry:

Public

### Business Situation:

TRA was experiencing significant revenue leakage because goods were dumped in the country while declared as transit goods to avoid taxation.

### Solution:

TRA implemented Electronic Cargo Tracking System to maximize its revenue collection & stop the dumping of goods carried out to avoid taxation and duties.

### Benefits:

- Revenue Collection Increased
- National security increased due to effective tracking of Cargo
- Efficient & effective transit management operations

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- The system also raises an alarm if it does not receive reports/messages from the cargo unit

## Technologies

MS .Net, MS SQL Server 2008, IE using IIS Web Server, Visual Studio 2010

## Benefits

Techno Brain's Electronic Cargo Tracking System has brought a large number of benefits from improved security to increased safety for customs officers and quicker turn-around times at the port along with paving the way for increase in revenue and duty collections in the long term.

### Key benefits of ECTS system:

- Fully integrated with TRA legacy system allowing customs officers to track all cargo records at anytime
- More efficient and effective transit management operations
- Increased revenue projection due to more effective taxation
- Reduction in cargo dumping
- Greater national security due to effective tracking of cargo
- Improved safety with TRA customs officers able to identify the location of cargo at any given time
- Reduced congestion within the port area and on the roads
- Increased insight into truck movements providing more accurate planning improvements to the transportation infrastructure