

Jordan customs
Electronic Transit Monitoring and Facilitation
System
(Jordan model)

Supply chain Security and Facilitations measures taken by Jordan customs

- To ensure its move towards effective and efficient security control of the int. trade supply chain and maintain high level of facilitations Jordan customs implemented the following projects:

1. The installations of local CCTV systems and the remote video monitoring system that covers all customs houses.



2. Inspection of high risk cargo using advance X-Ray cargo inspection systems.
 - Jordan customs installed more than 17 cargo inspection system along its border site in coordination with border security agencies



3. Implementation of advance electronic Risk Management System.
4. Implementations of automated system for customs Data Asycuda World at 19 customs centers.
5. Implementations of single window in 3 customs houses in order to coordinate functional responsibility with other government agencies and assure effective resource allocations. it is expected to implement single window to all customs house by mid 2011.

6. The last but not least measure is

The installation of Electronic Transit
Monitoring and Facilitation System

Jordan customs Electronic Transit Monitoring and Facilitation System (Jordan model)



Background

- Transit trade is an important element in the economic movement in the Hashemite kingdom of Jordan for the following reasons:
- The strategic location of the kingdom made it center for the movement of goods between Europe, Africa and the Arabian Gulf region and West Asia.

- More than million trucks are annually passing through Jordan customs houses.
- The annual value of transit goods through the kingdom is more than 14 billion US\$
- The number of transit customs declarations are about 300 thousand per year.
- The value of guarantees that guarantee transit goods is about 7 billion US\$ annually.

Reasons to adopt a modern efficient solution

- The transit trucks are considered as one of the most dangerous means of smuggling inside the kingdom.

Arms smuggling



Electronic equipment smuggling



Necessity of a modern efficient solution

- The density and irregular flow of trucks from neighboring countries has led to the emergence of traffic jams for trucks at customs houses.
- The multiple points of entry and exit and the need for security and customs physical inspection.



Necessity of a modern efficient solution

- Some trucks have to wait many hours between the shifts of convoys and some times to stay overnight at border customs centers.
- The traditional customs escorting process (convoys) cause traffic jam at the high ways and disturb the smooth movements of cars and passengers, and delay the movement of goods across the country.



The solution

- Jordan Customs began the search for a solutions and modern means to address these bottlenecks and accelerate the movement of goods across the borders.
- Accordingly. Many experiments has been conducted and many modifications introduced to make it possible to benefit from vehicles tracking system to monitor and control the movement of transit trucks across the kingdom.

The solution Components

A GPS unit :

A device installed on the truck to determine its coordinates using GPS satellites signals. This unit is connected to electronic seals installed on doors of containers and trucks.

Electronic seal:

The e- seal is used to seal the container doors and to connect the trailer with the tractor.

Communications network (GSM/GPRS).

The task of this Communication system is to transfer violations and coordinates of the tracked truck in the form of an electronic signal from the vehicle to the control room and vice versa.



Control Center:

Consists of communication, Data base and application servers necessary for processing electronic signals which are received from trucks.

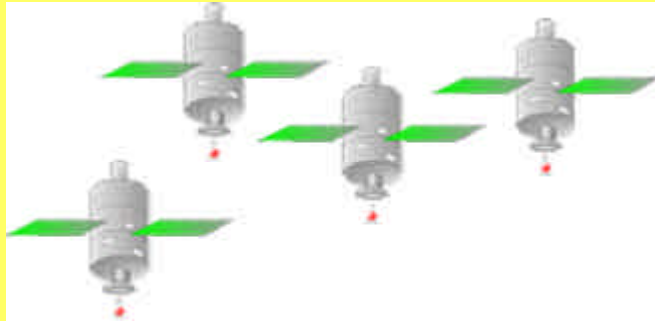
GIS/Digital Maps :

Electronic maps and Satellite images of the Kingdom are displayed on a large Monitor wall.

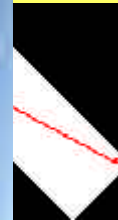
PDA and WiFi:

used at the customs centers to initiate and terminate transit trip.





GPRS
Networks



tracking
Unit



Mechanism of work:

Trip initiation

- Electronic Tracking devices and electronic seals are distributed to the concerned custom Centers involved in this system.
- After completing customs declaration the incoming transit trucks are moved to the electronic tracking yard at which the tracking units and the electronic seals are configured and installed on the transit trucks, and the transit trip is initiated. The process of installation takes two minutes.

During the trip

- The trucks are monitored on line at the central control room situated at customs head quarter. The system is capable of detecting any violations in the transit trip such as:
 - Tampering with the tracking unit or electronic seals
 - Diverting from the pre assigned transit route
 - Splitting the tractor from the trailer
 - Opening the door of the containers
 - Stopping at dangerous areas



Violations Handling and trip termination

- Customs escort patrols and enforcement patrols are informed about any violations to follow them up.
- A trip report of the journey is issued at the departure customs center to take the necessary procedures and show any violations committed during the transit journey.
- Electronic Tracking devices and electronic seals are removed from the trucks at the departure center and the Control Center is informed as a pretext to use the device again on another truck on the opposite direction.
- A sub control room was built at the Enforcement Directorate and Customs Escort Directorate to manage and direct the patrols and addressing any violations committed by transit trucks.

Trip report

- A Trip report is issued at the end of each journey (a report of the journey) that includes the following information:
 - Transit journey's rout
 - Places of stops of trucks and duration of each stop in each location during the journey.
 - Places where trucks deviates from its specified track.
 - Total time that the journey has taken.
 - Violations committed during the journey and measures taken.

A screenshot of a mobile application interface showing a trip report form. The form is titled "TRIP REPORT" and contains several sections for data entry. The sections include: "1. TRIP INFORMATION" with fields for Trip ID, Date, Time, and Location; "2. TRIP ANALYSIS" with fields for Trip Status, Trip Duration, and Trip Distance; and "3. RECOMMENDATION" with a text area for notes. The form is designed for data collection and analysis of transit journeys.

Electronic
Tracking

الوضع الجديد

Traditional
escorting

الوضع الحالي



Main Advantages of this system

- Direct contribution to Security and facilitation of International Trade Supply Chain as the system introduce maximum possible facilitation without sacrificing the security needs.
- Curb smuggling in transit trucks passing through the kingdom
- Immediate release of transit trucks from the entry point after completing customs procedures, without a need to wait for truck convoy and traditional escorting.

- **Reducing the waiting time of transit trucks inside custom houses from an average of 8 hours to few minutes.**
- **Accelerating transit trucks movement across the kingdom and accordingly, reducing the cost of guarantees presented from freight and clearance companies by reducing their time release.**
- **Reducing physical inspection of goods at points of entry and exit**
- **Saving time and costs for the private sector.**
- **Increasing the volume of transit trade across the kingdom and adoption of Jordan as a fast transit country among countries of the region.**

Thanks for your attention

Project Manager

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Master . Telecommunication Engineering
Bachelor. Electronics engineering

**Director of telecommunication and electronic control systems
At Jordan customs.**

Implemented many successful project for Jordan customs including:

Centralized video monitoring system for all customs centers

Electronic Transit Monitoring and Facilitation System

Electronic complaint and suggestions system

Installations of X-Ray and Gamma Ray cargo inspection systems

Installation of Audio Video and Data VSAT telecommunication network.

Member higher steering committee for customs computerization

Consultant for government agencies in Cargo inspection Night vision and electronic tracking systems