



OE VX

Case Study

Oevx Limited to track fashion shipments originating in China with SecureTrac self-powered satellite tracking units.

Summary of Study

The system designed by OEM Group Ltd (Enfield, UK):

- *SecureTrac* – OEM Group's GPS satellite tracking and communication module
- *Access to the SecureTrac online portal*

The *SecureTrac* monitors the trailer movements - the 100 units were set to report their position three times per day, with some added start-stop movement reports for geo-fenced alert areas. Location was reported back to the client on the SecureTrac portal via the *SecureTrac's* satellite uplink.

Case Study Specifics

Company Profile

OE VX supply bulk shipments of Chinese manufactured products to different countries throughout Europe and ship from the UK using numerous third party freight forwarding companies.

Business and Technical Situation

The freight forwarding companies do not supply any method of tracking their vehicles and this creates three problems:

1. Visual transparency to monitor progress of the third party shipments and efficiency of supply.
2. Pre-alert delivery preparation at various delivery locations.
3. Safety of loads, which may sit overnight prior to delivery and unloading.

The main challenge for this application was that OEVX required a portable tracking system that would be efficient over numerous countries without roaming charges and could be attached and removed from various vehicles very simply.

Costs for these issues to OEVX:

1. Thefts from the vehicle when parked overnight outside delivery locations waiting to open.
2. Shrinkage loss during delivery unloading due to lack of pre-preparation and administration.
3. Unnecessary freight charges for waiting times due to lack of preparation on delivery.
4. Based on 50/100 shipments per month the combined total losses from the above could equate to tens of thousands of pounds per month.

The reason that OEVX LTD found this to be such a challenge to solve was many GPS tracking systems are commonly wired into vehicles' power source, which in this case could not be done on third party vehicles. Also, most SIM based GPS tracking options are not suitable for international tracking where network providers vary from region to region within country-to-country, providing expensive roaming costs. SecureTrac is unique in providing a self-powered, **unwired** and **satellite-based** system with no roaming costs worldwide.

Search for Solutions:

1. OEVX had searched the market for alternatives and had found only SIM card based systems using cellular networks (expensive and in most cases requiring constant power). They had found one system which was battery powered, however the batteries required recharging after only a few days of constant use: they could not

therefore be used continually on long journeys as organising battery recharging was not feasible. OEVX were unable to identify any SIM based system that was either applicable or cost effective.

OEVX approached Secureseal Systems for self-powered GPS tracking and the SecureTrac system was able to acknowledge the following features and benefits:

- a) Built-in motion detector allowing OEVX to monitor vehicle starts/stops and en-route geo-fenced locations.
- b) Pre-warn email alert when vehicle was 10-15 miles from delivery location.
- c) Small and flexible hardware. The SecureTrac unit measures approximately 280mm x 75mm x 12mm and weighs less than 300g and therefore is ideal to be placed on the vehicle in a temporary fashion dash-board and easily removed and switched to new vehicles as required.

Solution proposed by SecureSeal Systems Ltd

A *SecureTrac* device to provide GPS tracking to monitor movement and location of the trucks. SecureTracs have batteries that last up to six years. Units can be programmed to report based on start/stop motion or for a set number of times per day.

Methodology

- a) The built-in motion detector allowed OEVX to monitor progress of the vehicles and at key progress locations, e.g. the port of Dover, arrival at EU ports, arrival at destination, etc.
- b) The “shipment approaching” alert was achieved by using the built-in motion detector to provide GPS locations while the vehicle was en-route and setting a geo-fence area approximately 10/15 miles approaching the destination. Therefore the SecureTrac software would send an automatic email to relevant personnel confirming the vehicle was approaching.

It was very easy to trial SecureTrac by supplying OEVX with 10 units on a short trial 3-month basis. This allowed Secureseal Systems Ltd to monitor the reports from the vehicles as they travelled between the UK and Paris. As the SecureTrac units are simple to re-programme with different reporting formats using wireless programming technology Secureseal Systems Ltd in conjunction with OEVX Ltd was able to re-programme certain SecureTrac units to perfect the best reporting scenario over the 3-month test period. In addition, from using the

reported locations of vehicles travelling to Paris, it was simple to set up a geo-fenced area outside Paris and test the automatic email alert function as pre-warning for deliveries.

Case Study Outcomes

Based on the 3-month trial it was confirmed that a simple 200 message per month service package would be required to cover all possibilities of unit reporting. Based on maximum reporting formats, the SecureTrac unit would have the capacity to report for a minimum of 3 years without need of battery change. This provided an excellent return on investment for hardware costing approximately £240 per trailer, the equivalent of only £80 per trailer per year.

Cost comparisons can be made between hardware costs of SecureTrac vs. SIM GPS tracking units, and also the SecureTrac communications cost against SIM charges with roaming costs. Comparative costs for running the system could be made against losses or potential losses per month for the reasons noted above and also the increase of insurance premiums for OEVX when not using a GPS tracking system.

The initial trial and rollout was with OEVX third party freight carrier, Woodland Transport Ltd, based in Chelmsford and Coggeshall in Essex with warehousing facility at Felixstowe. Their initial tracking contract was for UK to Paris shipments.

Following successful rollout the system was expanded over 100 units to various EU destinations, including Italy and Eastern Europe, and most recently introduced to the Brunel International Shipping Company with headquarters in Barking, Essex.

Keighly Marsh, OEVX contract manager at Brunel was introduced to the SecureTrac system on OEVX in November 2012 and ran tests on their vehicle shipments to the EU with extremely positive results.