

TRANSPORT VEHICLE TRACKING

1. Objective

Having vehicles have been operating a black box tracking system which is a retrospective system (vehicles location, speeds and time is down loaded over night) when the vehicles are parked up.

The provider of this particular software was a company called KL2 and, due to the advances in vehicle tracking and that the vehicle tracking modules provided by KL2 were becoming obsolete, Transport Services were given the task to look at alternative systems that would be cost effective and would meet the requirements of all Transport users.

2. Systems Reviewed

The following systems were reviewed by the Transport Board:

- ADSI
 - BATRAK
 - CYBIT
 - ETS
- a. **ADSI** - Provided a "live" GPS Tracking system which is a web based system. The installation costs and air time, which is paid monthly, was considered too expensive to run across the fleet. All the information that we required the system to do it could deliver but in operation it was considered too complicated when demonstrated and also the installation warranty period was limited to one year only.
- b. **BATRAK** – Formally known as KL2 this provided an upgrade of a GPS "live" web based tracking system instead of the retrospective tracking system currently in use. When demonstrated this system allows operatives to track their fleet vehicles while setting up Geo offence logs flagging up vehicles leaving the borough or being used outside of normal working hours. The system was user friendly and has a suite of reports designed to help operatives. The cost of the system is based on how long you define the working life of your fleet vehicles with a one-off payment built into the vehicle purchase price. This price includes all air time and any other upgrades to Maps and software and would not incur any extra costs so no other charges would be incurred. The vehicle unit has a warranty of 3 years and is currently operated by Blue Chip Companies such as Coca Cola, General Motors and the United Nations.
- c. **CYBIT** – This provided a live GPS tracking system which is also a web based system. However due to the considerable amount of air time charged per calendar month it was ruled out on cost. Also the software when demonstrated was too complicated for users. Operated by Carlsberg & Volvo

- d. **ETS** – This is a live GPS web based system that was user friendly when demonstrated with a suite of reports that could be tailored for fleet operators. The installation costs and air time were considered too expensive plus any upgrades to the web based maps incurred licence fee costs.

3. Conclusion

BATRAK – was selected as the preferred partner regarding vehicle tracking. Having already worked with KL2 on our existing fleet, the upgrade on offer was deemed as a cost effective alternative and with the advantage of ease of use. The other additional advantage of a one-off payment is with regard to installation and air time built into any vehicle / plant purchase price and no other hidden charges.

4. BATRAK - the system

- a. A live tracking system being fitted to all new vehicle purchases while the old current system KL2 is being phased out.
- b. Capable of monitoring not only the vehicles performance but the driver as well.
- c. Each driver is issued with their own individual fob to use in order for the vehicle to be made operational (“start up”). This tracking system identifies not only what type of drivers licence the user has but what type of vehicle they are permitted to drive and so e.g. it will not permit a driver without entitlement on his licence to drive a HGV or PCV vehicle.
- d. All users have a unique log in password and can view all their own department’s vehicles by Fleet Number, Driver or Registration.
- e. The system displays the current locations, speeds and routes that vehicles are taking and who is operating that particular vehicle or plant machinery showing activations for tail lift, tipper, pto engagement and sweeping modes.
- f. The web based system allows the viewer to zoom in on to any vehicle either by the aid of live maps such as Google earth or by the standard map formats where they have the facility to trace back any route including viewing any vehicle activations.
- g. Part of the suite of reports the system will highlight are excessive braking, steering, throttle use and idle time.

5. Performance and Efficiency savings

- a. **Operators** - have now received training for logging on with their unique passwords enabling them to navigate the web based system with Geo fences having been set up per vehicle, by department and location, with users looking at their current fleet vehicles movements whilst checking routes and down time.
- b. **Fuel** – as part of the on going development of the Batrak system it is Transport's intention to start Driver analysis tables in March / April 2012. This will monitor Driver Acceleration / Deceleration events, Excessive idle time and End drive speed tables. This will be first piloted on the PTS bus fleet and then rolled out to the rest of the transport users throughout the year, paying particular detail to fuel usage.
- c. **Driver performance** – Every driver is different but looking at harsh Deceleration events and Acceleration and making the driver aware of these actions can reduce wear and tear on our vehicles and save fuel. With the correct awareness training the end results will be linked to a driver's league table to be displayed highlighting all of the drivers fob numbers but excluding names. This will be displayed on a weekly basis and reviewed monthly.