Anytime, Anyplace, Anywhere
Asset Tracking with GPS

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Overview
- Applications
- Technology
- Prototype "tagTrax" service
- Case Study

Functions & Operations
- Whereabouts
- Delivery notification
- Route deviation
- Speed Compliance
- Out of Bounds
- Productivity
- Dwell time
- ETA
- Distance to next stop
- Dynamic timetables
- Dynamic task allocation
- Strategic placement
- Traffic data probes
- Mobile monitors

Fleet Monitoring
- Emergency Services
- Governmental vehicles
- Commercial Services

Multi-modal & Inter-modal Tracking
- Aviation
- Shipping
- Port terminal
- Delivery Vehicle

Covert Tracking
- Enabled by High Sensitivity GPS
- Capable of working in demanding environments
- Improved acquisition and tracking
- Integrated, concealed and discrete units
Theft & Property Recovery

- Continuous position monitoring
- ‘Lock’ asset to location
- Alert on motion detection
- Immobilised on location breach (geo-fencing)

Black Box Incident Recorder

- GNSS provides Position, Velocity, Time
- 10m, 1m, 10cm
- First-in, First-out buffer
- Accident reconstruction and evidence

Hazardous & Precious Cargoes

- Covert monitoring of “vulnerable targets”
- Prior knowledge of route/location
- GNSS used to monitor actual position
- Any deviation triggers alarm

Electronic Monitoring

- Personal Security (Children, Health, Workers, VIPs)
- Judicial (Offenders, immigration, anti-social)
- Civil Security (Disease, attack, forces)

Additional Services

- Passenger Information
- Customer Information
- Driver / Vehicle / Process Performance
- Condition Monitoring (e.g. locks, temp, humidity)

Emerging Applications

- Unmanned Cargo Handlers
- Warehouse Operations
- Autonomous barges
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Key Technologies
- Location (High Sensitivity GPS)
- Communications (GSM/GPRS)
- Mapping & Databases
- Data Logger
- Power

High Sensitivity GPS
- Homes
- Offices
- Urban
- Suburban
- Rural
- Buildings
- Industrial
- Transport

Improved Availability

Improved Availability
Indoor Availability

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Geo-fencing

User Details

Reporting

Alerting
Data Logging

Infringements

Analysis & Archive

Overview

Applications

Technology

Prototype "tagTrax" service

Case Study

Typical Street

Typical Building
Typical Meeting Room

Typical Demonstration

Typical Results

Conclusions

- The technology is ready...
- Who needs it?
- What operations?
- What are the operational requirements?
- What problems can we expect?
- What is the Business Case for Logistics & Transport?