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ANNOUNCEMENT TO AUSTRALIAN SECURITIES EXCHANGE LIMITED

10 December 2009

Attached is the presentation to be given by the Managing Director at the Vietnam Transport 2009 Conference today regarding Automatic Vehicle Identification.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Gary Phipps'.

Gary Phipps
Company Secretary



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Be Certain.

AVI

Automatic Vehicle Identification

Practical Real World Case Studies & The Value of Physical Security
December 2009

- What is EVR / AVI?
- Why AVI and Why RFID?
- RFID
 - System Components
 - Tags
- System Security
 - RF and Data
 - Physical
- Why an AVI System is at Risk Without Physical Tag Security
- Case Studies
- Wrap up





What is AVI?

- Automatic Vehicle Identification
 - Electronic Vehicle Registration (EVR)
 - Tolling
 - Access control
 - Traffic flow management
- Used to:
 - Electronically and automatically identify vehicles
 - Validate their status and authenticate details
- Technologies associated with AVI
 - Radio Frequency Identification (RFID) technology
 - Optical - Automatic License Plate Recognition (ALPR) - has some issues



Why AVI and Why RFID?

- Money
 - Cost savings through greater automation
 - Increased revenue through improved vehicle registration compliance
 - Fast return on investment
- Compliance (which is also “money”)
 - Expired registrations quickly identified
 - Preclude “sharing” a registration tag between multiple vehicles**
 - Avoids a registration tag for a low-value vehicle being placed on a higher value vehicle**
- Security (National & otherwise)
 - Improved law enforcement benefits via detection of “wanted” vehicles**
 - Detection of non-registered foreign vehicles**
- Traffic Management
 - Better understanding and management of traffic flow

**** Requires correctly implemented system with physical tamper detection tags**



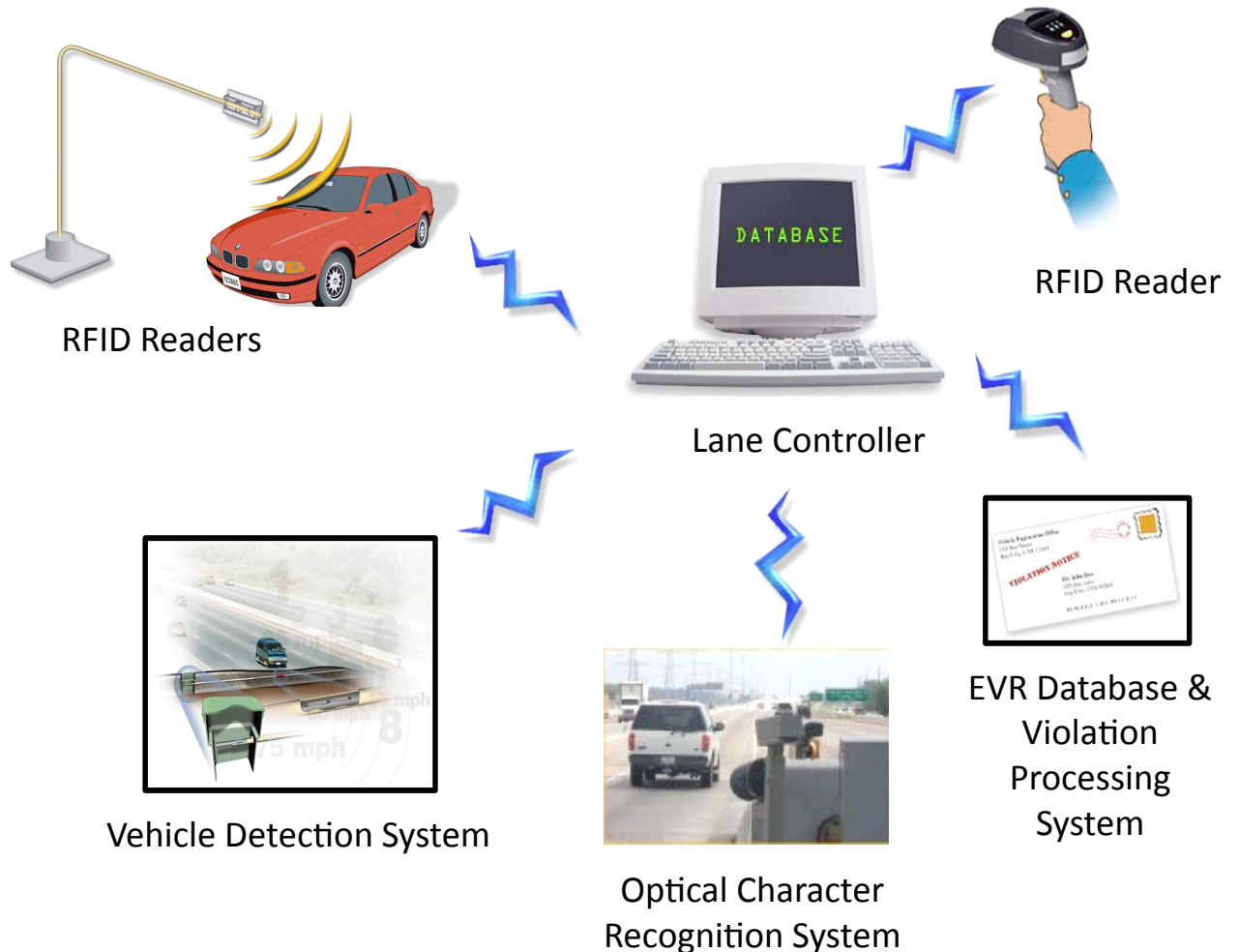
Why AVI and Why RFID?

- Automatic License Plate Recognition (ALPR)
 - More expensive
 - Only works in unobscured line-of-sight situations
 - ▶ Issues with heavy traffic, mud on lens, heavy rain, fog, smoke from fires etc
 - Easier to “cheat” the system
 - Does not allow read/write access
 - ALPR does not operate well across multiple lanes (line of sight)
 - RFID can be read at speeds up to 160 km/h
 - RFID operates in all weather and traffic conditions
 - RFID solutions extensible across all AVI applications
- ALPR and RFID are occasionally used together



AVI/EVR System Components

- A Radio Frequency Identification (RFID) **sticker tag** – tamper evidence mandatory
- **RFID readers** (Fixed, Mobile, Hand-held and/or Desktop)
- **Vehicle presence (Traffic) detection** system Back-Office database, Lane Controllers, and Violation Processing System





AVI “Passive” RFID Tags

- Passive UHF RFID
- Passive only draws power to transmit when within the range of the reader
- No batteries to worry about
- Economical to implement and maintain
- Can be placed on a headlamp or inside windshield
- However, the system is at risk unless physical tag security is employed
 - Tags could be moved to unauthorized vehicles, shared, swapped etc
- Hence, EVR solutions mandate tamper evident tags
 - Avoids fraud, theft or national security concerns

An EVR system that **does not use physical tamper indicating tags** is an incomplete system and **invites fraud**

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RF & Data Security (All solved!)

Tag Authentication

Prevents counterfeit tags from being used

1. Unique TID Authentication
2. Challenge-Response Authentication
3. Packet Counters

Reader Authentication

Sensitive information passed only to appropriate readers

1. Algorithms & secret passwords ensures access by appropriate readers
2. Password locked memory

Tag Data Protection

Valuable information is not exposed to unauthorized readers

1. Read Lockable Memory
2. Customer Encrypted Tag Data

RF & Data Security is Now Very Secure ... BUT ...

Everyone thinks of RF/Data security...

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...but without physical security, the system is still open to fraud



Three Elements of Physical Security

Security Cannot Be An Afterthought

Authentication

Ensures that a tag or label is genuine (by making copying impossible or prohibitively expensive)



Serialization

Enables individual label identification and tracking (hierarchical serial numbers uniquely identify each individual item & family of products to which it belongs)



Tamper Evidence

Indicates whether tag or label has been manipulated (Both physically and electrically – the physical act must be electronically detectable)



Genuine Asset

Security must be designed in from the outset, it cannot be added on afterwards



Why an AVI System is at Risk Without Physical Tag Security

- Physically tamper-evident RFID tags **guarantee the one-to-one relationship** between vehicle and tag
- One-to-one relationship is mandatory to assure:
 - Tags are not transferred to:
 - ▶ A foreign car (national security)
 - ▶ A non-registered car (fraud)
 - ▶ Shared between vehicles (fraud)
 - ▶ A vehicle of higher registration/tolling value (fraud)
 - Stored value & personal information is not misused
- Tamper Evidence guarantees accuracy
 - Which car are you really certifying on the road (and more importantly, which one are you not!)
 - Which car really crossed the border?



Making the Most of the Infrastructure

- Intelligent congestion flow management systems
- Congestion or peak-time charges
- Electronic insurance and/or “Warrant of Fitness” validation
- Integration with law enforcement databases
- Electronic toll collection
- Automated access control (e.g. Airports, Government Facilities)
- Parking and permit automation and enforcement



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Case study No. 1

Bermuda
World-first Commercial EVR

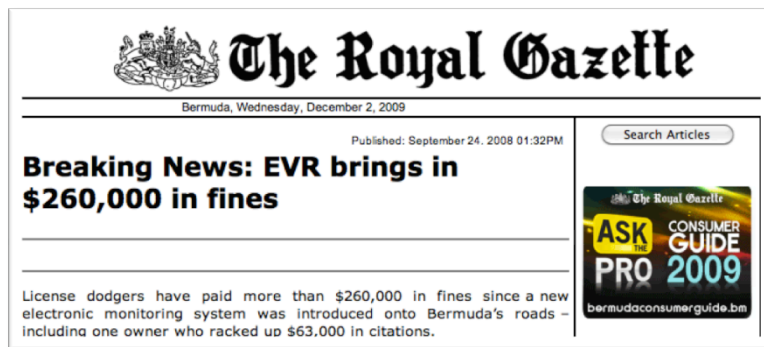


Worlds First EVR - Bermuda

- In 2007 the island of Bermuda became the first country in the world to implement a nationwide EVR system using tamper-evident RFID tags
- Bermuda was **losing nearly \$2.2 million** in annual revenue from vehicle registration non-compliance.
 - Approximately **8% of the island's cars were non-compliant**



- Bermuda's EVR system brought in **US\$260,000 in fines** in the **first 3 months** of operation.
 - A **forecast US\$11M return** over the first five years
- In the future the Bermuda TCD plans to monitor compliance of commercial vehicles operating in restricted areas during rush hour





Case study No. 2

Brazil
AVI & Tolling

- MIKOH and partners supplying into the second largest AVI integrator in Brazil
- Initial application is tolling
 - In excess of 100 lanes implemented
 - Will be installed in up to 600 toll lanes
 - Over 100,000 vehicle transactions daily
- Tamper evidence mandatory
 - Precludes tag sharing fraud resulting in:
 - ▶ Reduced setup-fee revenues (e.g. initial fee for each automobile to enter the system)
 - Applying to a vehicle of higher toll value (e.g. car tag on a truck/lorry)
 - Theft deterrent – Stolen tags are rendered useless
- Benefits
 - Maximizing revenue (setup fee collection, fraudulent toll use)
 - Gathering traffic flow information for planning
 - Enforcement

Same solution can be expanded into other AVI applications (e.g. EVR)



Case study No. 3

USA
Customs & Border Control



Free And Secure Trade – FAST

Between the USA and Canada/Mexico

- US Bureau of Customs and Border Protection adopted an AVI solution known as FAST
- A “critical solution to the trade versus security dilemma triggered by 9/11”
- Balances the need of “Just In Time” product deliveries across US borders with the security realities of a post 9/11 world
- 99 FAST lanes at 22 border crossings



Secretary Tom Ridge is shown how FAST works at The Bridge of the Americas in El Paso, TX.



Prime Minister Chretien, President Bush, Canada Customs Superintendent Manon Toronyi, and U.S. Customs Inspector James Mayer view truck arrival primary processing screen for FAST.



Free And Secure Trade - FAST

Tamper Evident Tags- Authenticity Guaranteed

- Tamper evident tag based solution
 - Tag identifies the truck and loaded cargo
 - Driver identity, route and vehicle are associated on the tag
 - Driver & vehicle identity are confirmed as valid individually & together
 - Tampered/moved windshield or headlamp tag no longer readable
 - ▶ Only authentic vehicles can pass the border
 - ▶ Solution tracks the vehicle NOT THE TAG
- Enabled more efficient processing of duties & taxes for Customs & Excise (**away from the border crossing**)
- Proved more cost effective for member companies due to lower fines, corrections & penalties



Summarizing Tamper Evident AVI Benefits

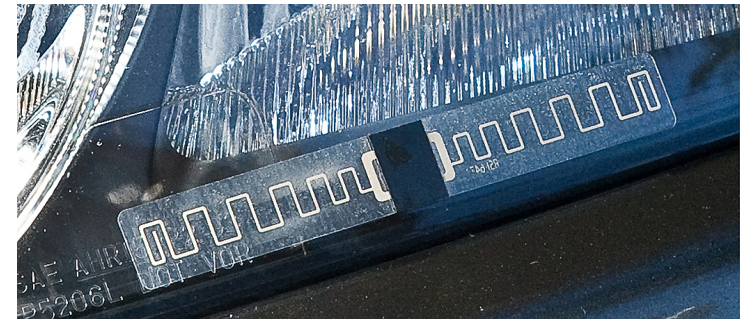
- **Supports many AVI applications:** EVR, tolling, access control etc
- **Guarantees relationship** between vehicle and tag
- **Short time** for ROI (<12 months possible)
- **Economical** to implement and maintain
- **Improved** registration and regulation compliance
- **Increased revenue** from vehicle taxes/fees
- **Improve service** delivery to road users
- Improve road **safety** and **environmental** standards (emissions controls regulation & compliance)
- Enhanced **National Security**
- **Physical security** is mandatory

An EVR system that does not use tamper indicating vehicle tags
is an **incomplete system** and **invites fraud**



MIKOH Corporate Overview

| | |
|--------------------|---|
| Year Established | 1993 |
| Global Sales | Sales to over 140 customers across 6 continents |
| Global Presence | New York; Washington, DC; Melbourne, Sydney, Canberra; ASEAN/Singapore |
| Awards/Recognition | Frost & Sullivan Innovation Award International Stevie Award Finalist |
| What we do | AVI & EVR Solutions or Advice/Consultancy Secure Asset Tracking Tamper evident RFID solutions Digital security ink jet printer solutions Security seals and labels |



*MIKOH is a world leading developer, **custom solution provider** and a key patent innovator of authentication and tamper detection technologies.*

MIKOH's system-level solutions protect the physical and data assets of governments and commercial organizations from conception, through the complete supply/delivery chain to consumption

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Thank-you

Question & Answer

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