



Idris Automatic vehicle detection & classification technology

‘Lane in a Box’

- a major step forward in lane-side equipment

TS89 – Tolling Technology
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Idris is a division of Federal Signal Technologies and the maker of the loop-based Automatic Vehicle Classification system used in most axle-based ORT installations.

But this presentation is to introduce a compact, easy-to-deploy solution for lane-side equipment but with no loss of performance.

We call it ‘Lane in a box’.



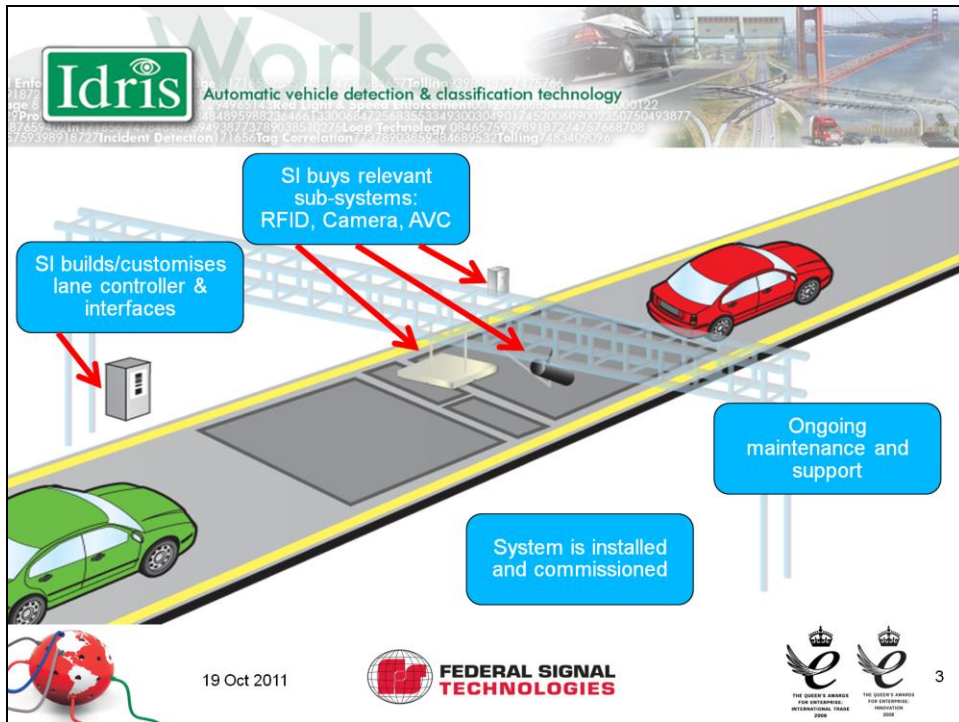
How is a lane delivered today?



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Firstly, a lane is normally delivered by a System Integrator. What does he have to do?

1 – He'll usually select each sub-system based on the specification, his experience, the customer's preference or price. These sub-systems will normally come from multiple specialist vendors.

2 – Invariably, that choice will require modifications to the SI's lane controller and probably new interfaces – not trivial.

3 – Each sub-system needs careful installation and commissioning, often requiring specialist skills on site.

4 – Ongoing maintenance and support is usually back-to-back with the component vendors.



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Pros & Cons (of today's approach)

Pros


- Very flexible solution
- SI chooses all components (unless customer specifies)

Cons

- Expensive
- Tricky integration (every time)
- Complex I&C, Support

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Of course there are pros and cons to this approach. Its very flexible, because you could pick anything from anybody, and as the SI you may be able to steer the selection towards your preferred component. On the other hand, there is a lot of work involved – and bespoke work is expensive. You have new costs and longer timescales for each new integration and you need to keep a lot of specialist skills up to date to cover all the vendors and changing products.

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If the customer had a magic wand.....

- *Lower cost*
- *Fast install*
- *High reliability*
- *Compact solution*



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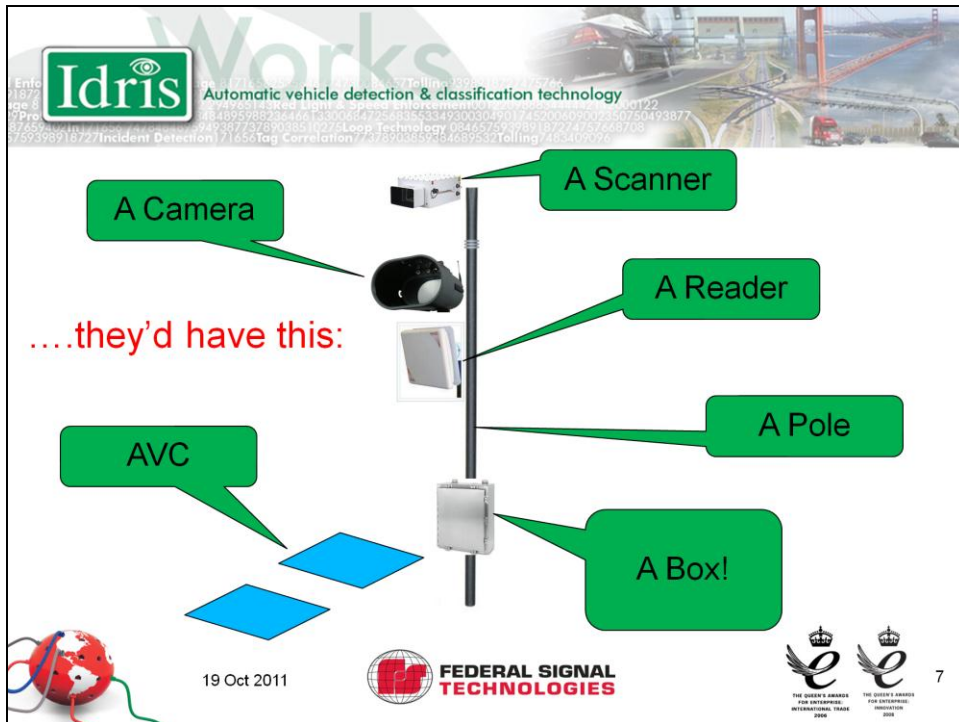
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Now, if the customer had a magic wand (especially in Orlando!), what would he ask for?

- 1 – He'll always want a lower price
- 2 – But time is money, so a quick install has value to him
- 3 – No matter how good the support, what he really wants is a reliable system that just goes on working
- 4 – And small is beautiful – a compact solution means less street furniture and more mounting options



As it happens, we have have just the thing:

- 1 – Let's start with a pole – that's simple
- 2 – Here's a box (but not the clever box. This one is really just for power and communications hook-up
- 3 – The really clever box is this PIPS camera running all the software for the lane: ALPR, AVC, Lane Controller.... And no big rack!
- 4 – A Sirit RFID reader is optional but easily included
- 5 – Idris AVC can be added. Its still the best AVC money can buy
- 6 – And if in-ground loops aren't possible and you can live without Idris loop accuracy, add a scanner

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It's a lane – *in a box*

or....

***Federal Signal Technologies
Micro Lane System***

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So there it is. Together, it's a Lane in a Box, or as our marketeers would rather call it:


'Federal Signal Technologies Micro Lane System'

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Incident Detection / 0846575957891872 / 4757668708
 Tag Correlation / 0846575957891872 / 4757668708
 Loop Technology / 0846575957891872 / 4757668708
 Tolling / 0846575957891872 / 4757668708
 Speed Enforcement / 0846575957891872 / 4757668708

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 THE QUEEN'S WARRANT FOR ENTERPRISE INNOVATION 2004
 THE QUEEN'S WARRANT FOR ENTERPRISE INNOVATION 2004

Whilst a single pole is a neat mounting solution, there's no reason why it can't be fitted onto any regular road-side structure.



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Applications




ITS

- EVR – Fixed and portable
- Test or trial sites
- Enforcement

Tolling

- HOT lanes
- Conventional tolling lanes
- Ramps

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Where is the Micro Lane System best used?

1 – In the general ITS field, it is ideal for fixed or portable EVR monitoring sites, or other audit systems

It is also ideal for test sites or for trials.

And it can detect vehicle speed to enforceable accuracies, including speed limit by class.

2 – In Tolling, it's perfect for HOT lanes but just at home in any conventional tolling lane or ramp.






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Benefits

- Pre-built & tested
 - Fast install, less need for specialist staff
- Single processor
 - Simplified system, lower power
- Reliable
 - Less components, less interfaces


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A key strength is that the system can be shipped pre-built and tested, making the install fast and easy.


The software runs on one processor, meaning less to go wrong and no complicated interfaces.






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Software

- Linux-based, for reliability
- Browser interface for easy management
- Configurable interface to back-office



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The software naturally runs on Linux, is easy to manage and can be interfaced to any higher-order computer or back office system.


System

- Wide operating temperature range – no aircon needed
- Pre-commissioned at factory
- All sub-systems are market leaders











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Because there are so few components, it will withstand the roadside environment without fancy cabinets or air conditioning.

Pre-commissioning at the factory means less specialist skills needed on site.

Best of all, each component is actually a best-in-class! Sirit, PIPS and Idris are each market leaders, so you even get the best performance available!





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Summary

- *Extends high-performance ITS technology to previously-inaccessible or unjustifiable projects*
- *Eases the introduction of advanced technology into developing countries*
- *Reduces costs generally in the ITS sector*

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In summary:

- 1 – This solution brings unmatched performance to applications which either couldn't afford it or make it fit
- 2 – It's a great solution for countries developing their infrastructure, with its pre-built supply and simpler install
- 3 – With fewer components and low cost of ownership it's very affordable, either as a complete system or as part of a bigger scheme

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*Federal Signal Technologies
Micro Lane System*

*It's a Lane....
....in a Box*

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Federal Signal Technologies' Micro Lane System:
It's a Lane....in a box!



Thank you!

Visit us at our Booth: 1507

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