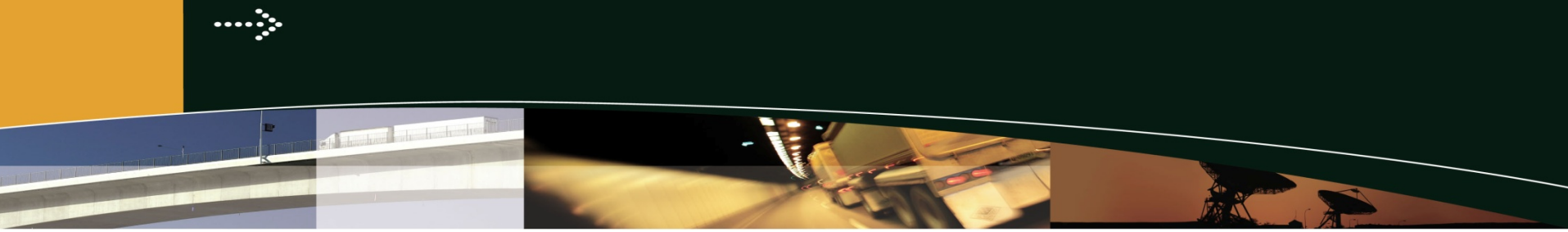


Transport Certification Australia Ltd

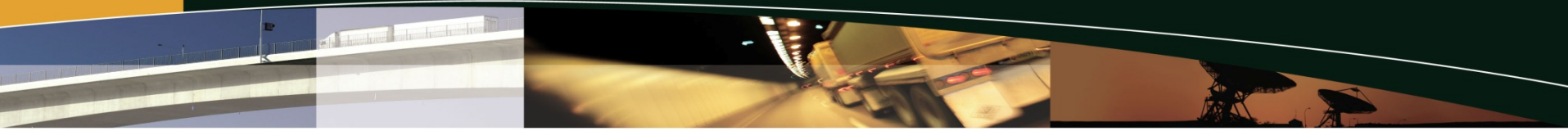
Presentation to
Parliament of Victoria
Road Safety Committee – Inquiry into Improving Safety at Level Crossings

14 April 2008

Chris Koniditsiotis & Charles Karl

Transport Certification Australia

Presentation format



Part one:

- About Transport Certification Australia Ltd (TCA)
- About the Intelligent Access Program (IAP)
- Policy & implementation

Part two:

- Regulatory telematics
- Railway level crossings
- Next steps
- Cost of an IAP solution

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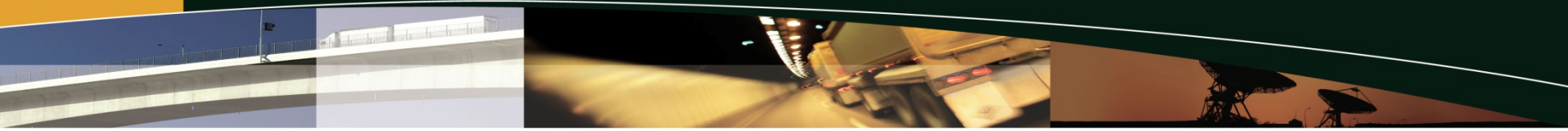
About Transport Certification Australia (TCA)



- Established August 2005
- A fully owned **national** government organisation
- Owners (Members) are Australian, State & Territory governments
- TCA's purpose is to:
  - administer the IAP
  - provide other evidentiary standard regulatory telematics solutions telematics solutions to government
  - serve as an independent national certification & audit organisation

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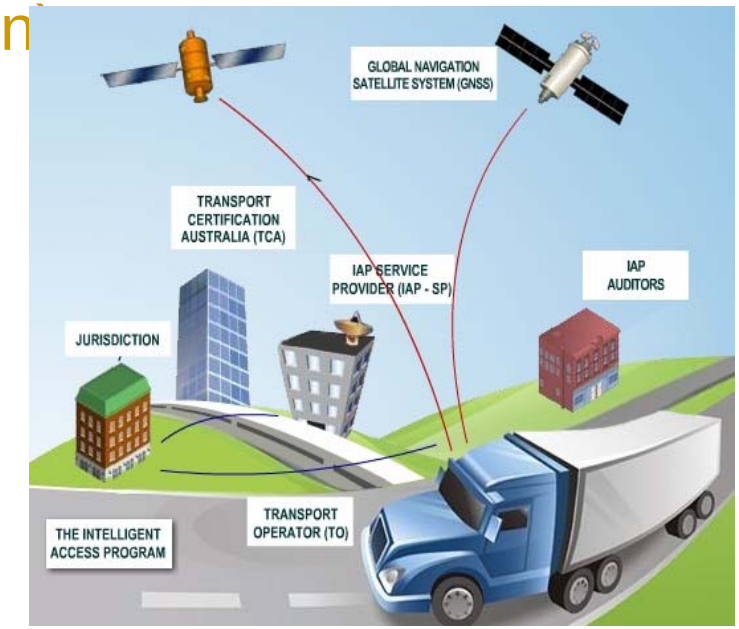
Application 1:
Improved Australian heavy vehicle access

General access (1st generation)

Restricted access (2nd generation)

Intelligent access (3rd generation)

The Intelligent Access Program Program
(IAP) is a voluntary program that allows access or improved improved
access to the road network in in
return for compliance monitoring using GPS and telematics solution



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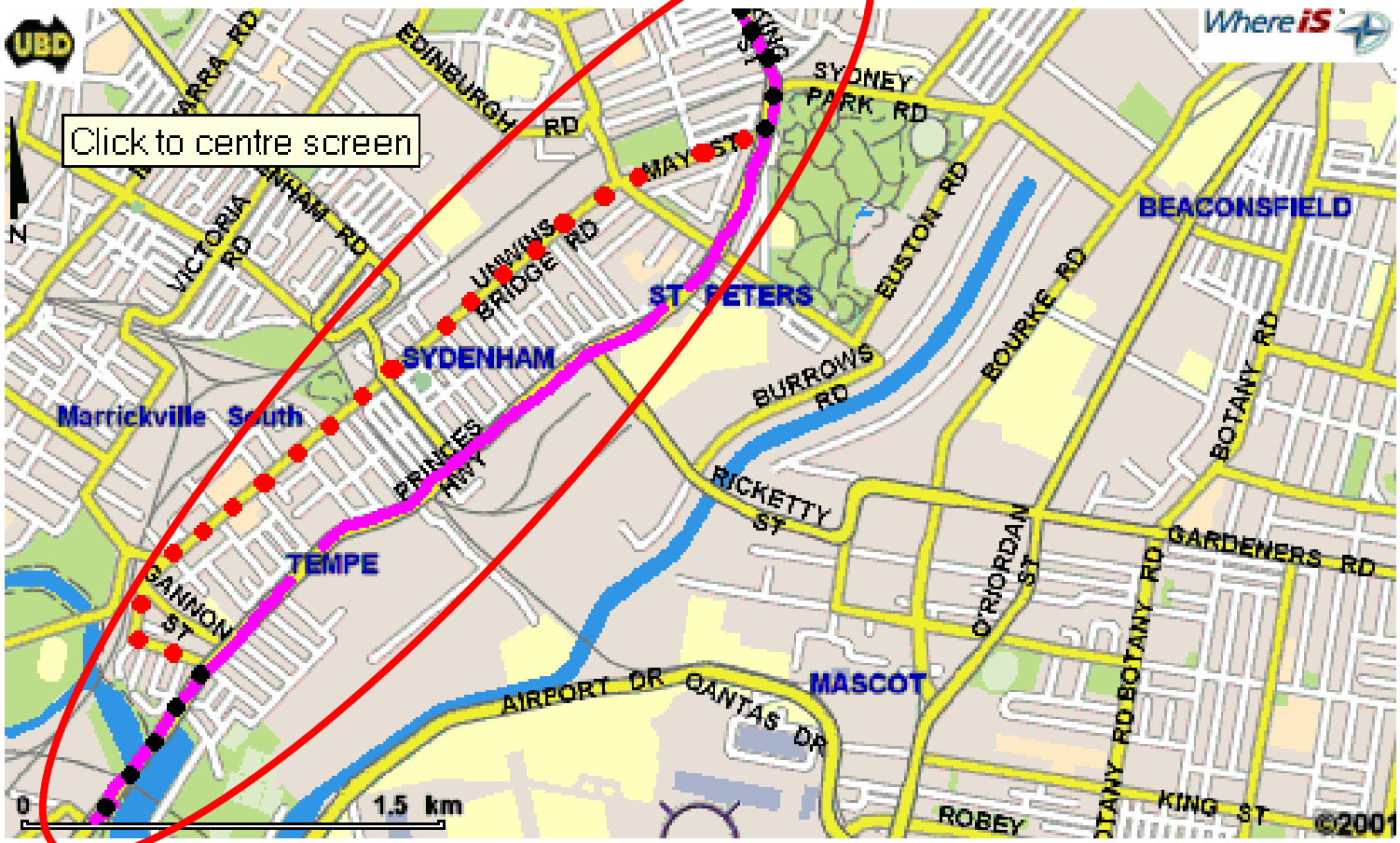
Application 1:
Improved Australian heavy vehicle access



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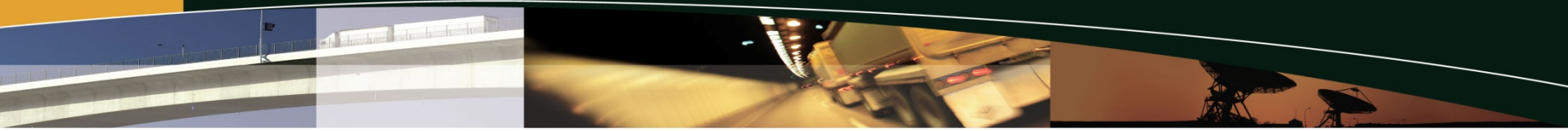
Application 2:
Tasmanian School Buses

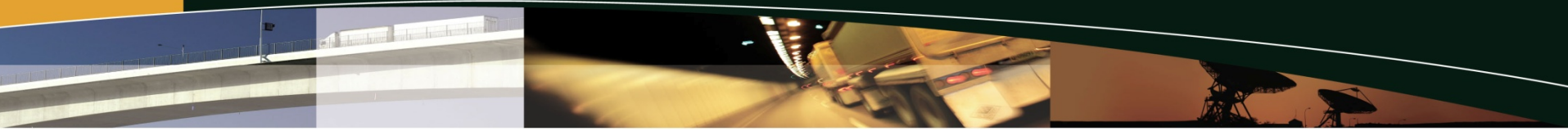
- Tasmanian Government funds 635 contracts for school bus and bus and route bus services provided by over 200 contractors contractors
- IAP used as a contract management tool to ensure route and and timetable compliance

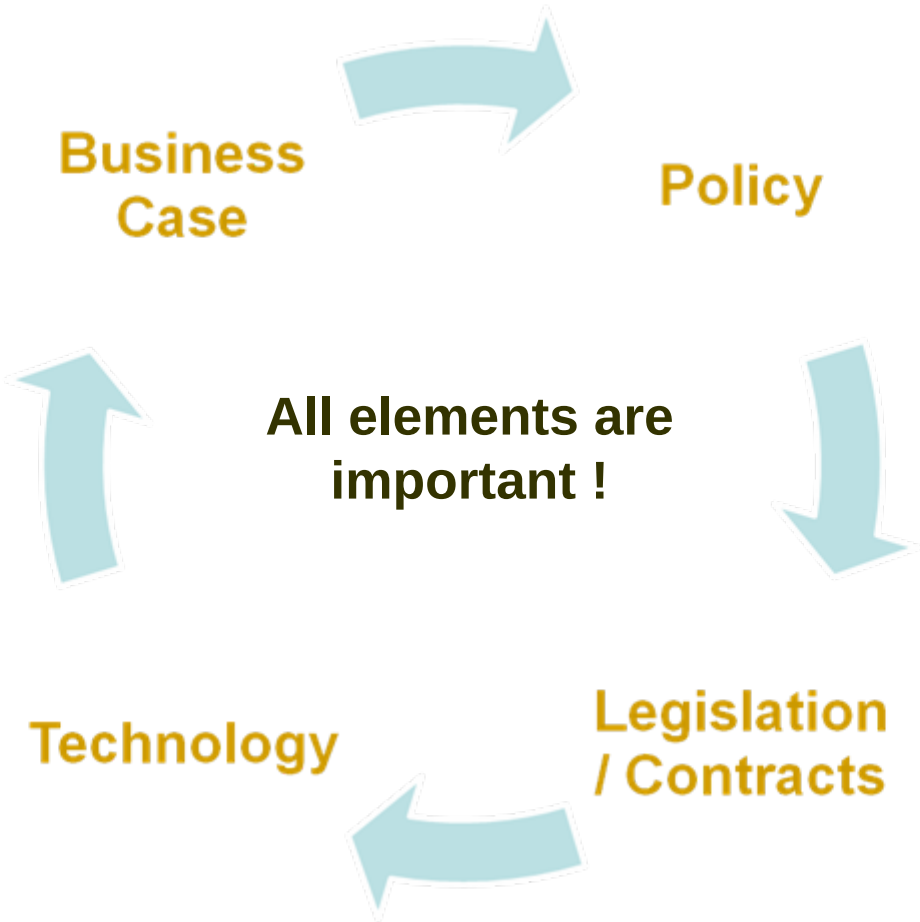


The IAP can be utilised

to deal with rail crossings

Policy & Implementation





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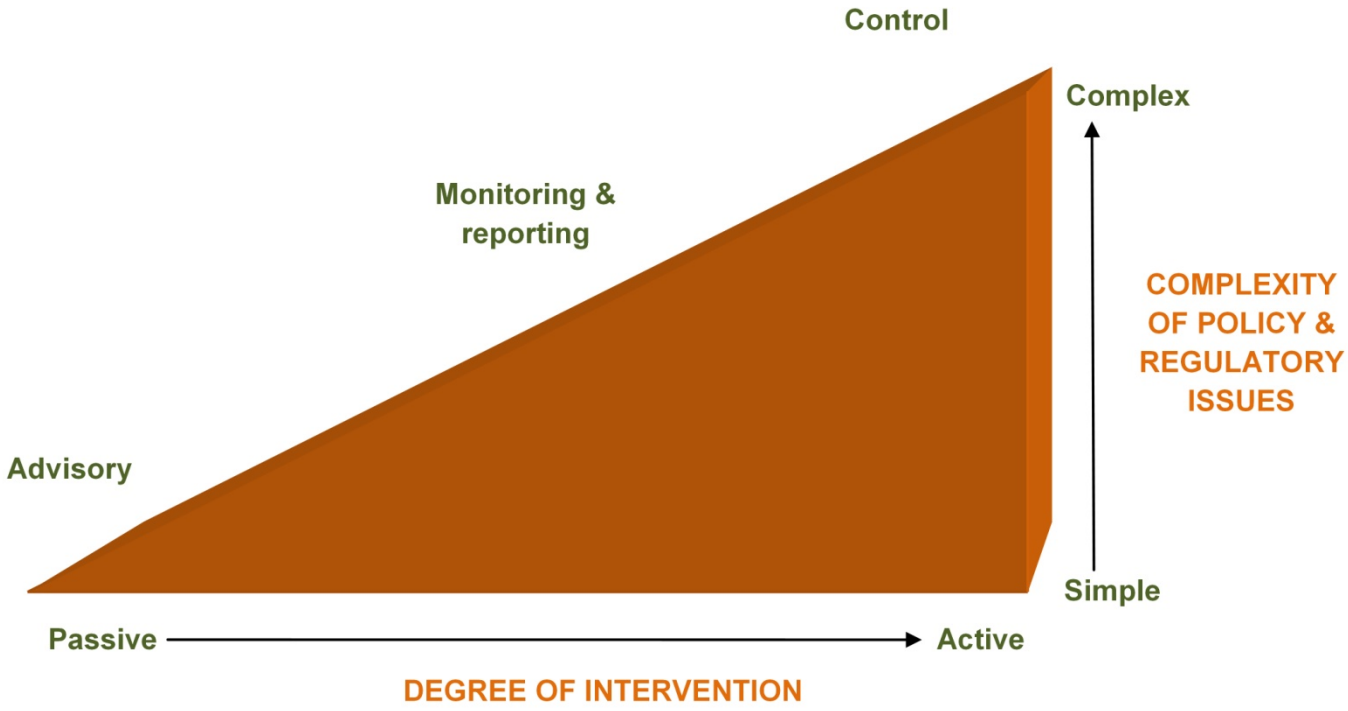
Finding a balance is critical

Options using IAP technology



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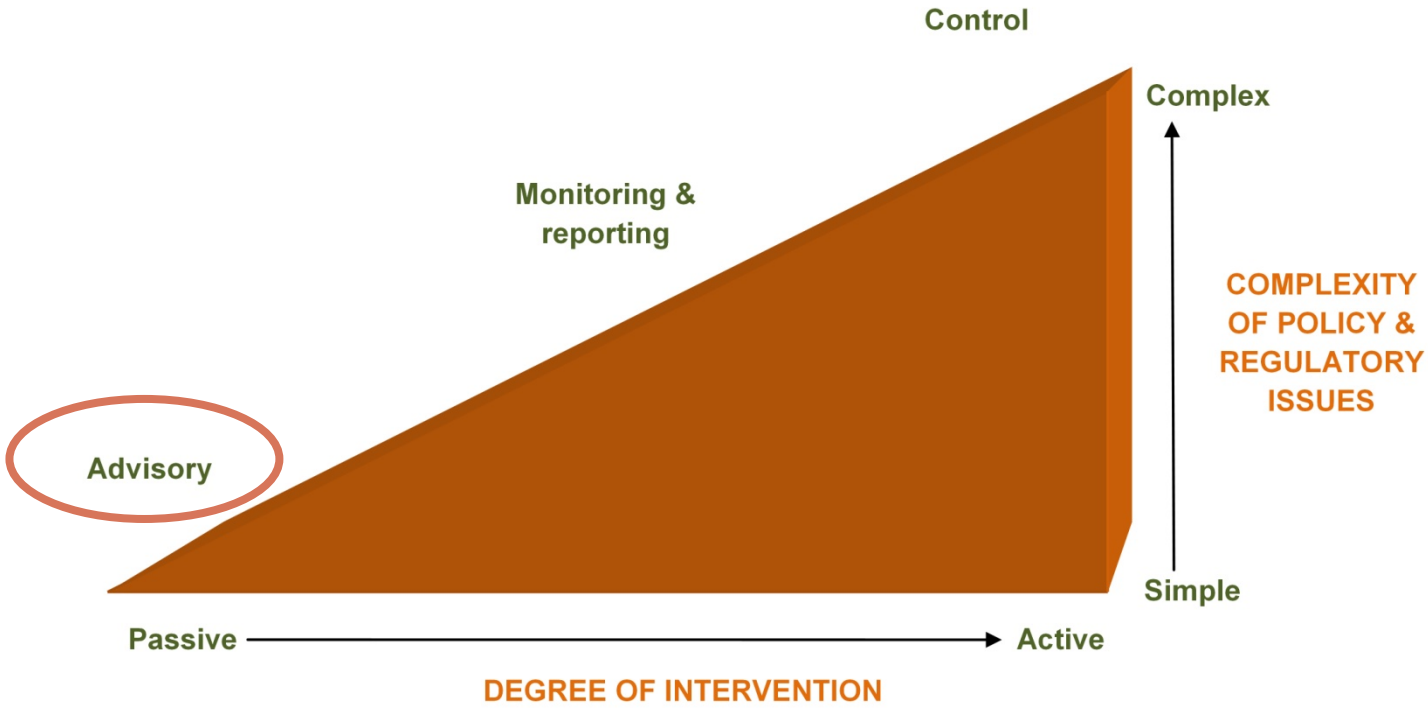
Options using IAP technology



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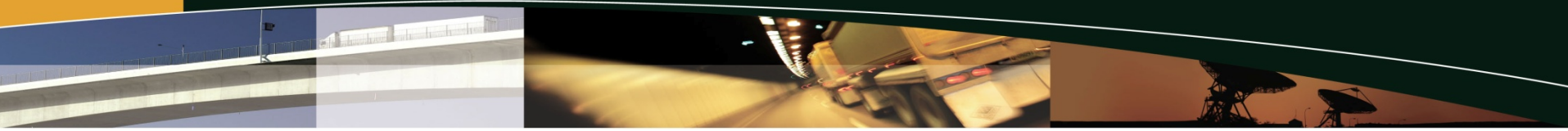
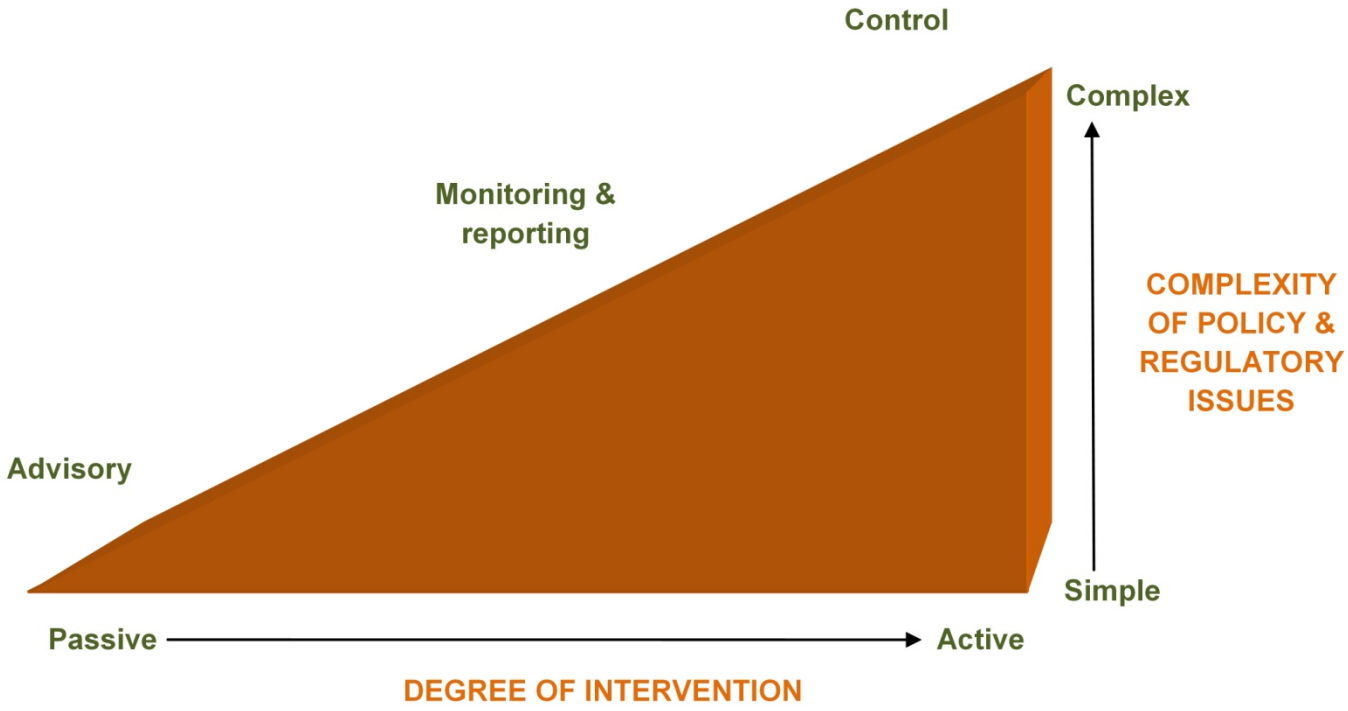
Option features



Advisory features:

- Passive intervention
- Buzzer warning
- Light warning
- Driver retains full control of vehicle on approach to rail rail crossing

Options using IAP technology



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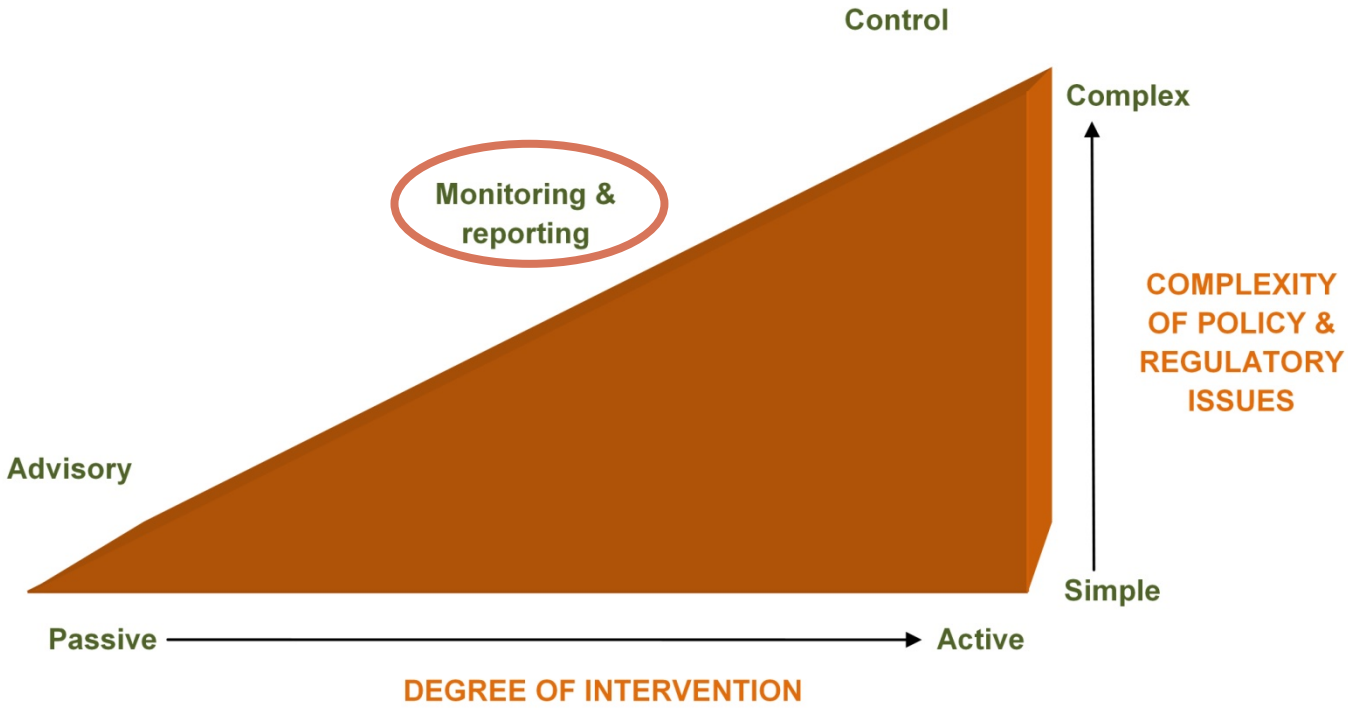
Options using IAP technology



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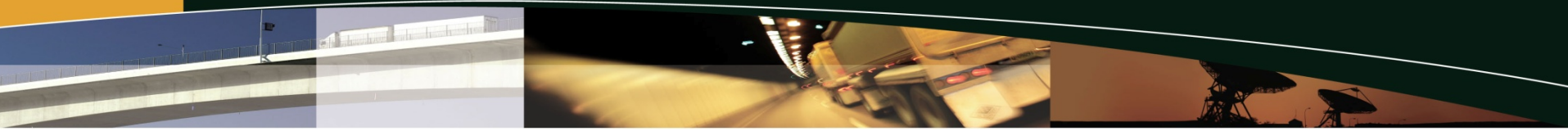
Option features

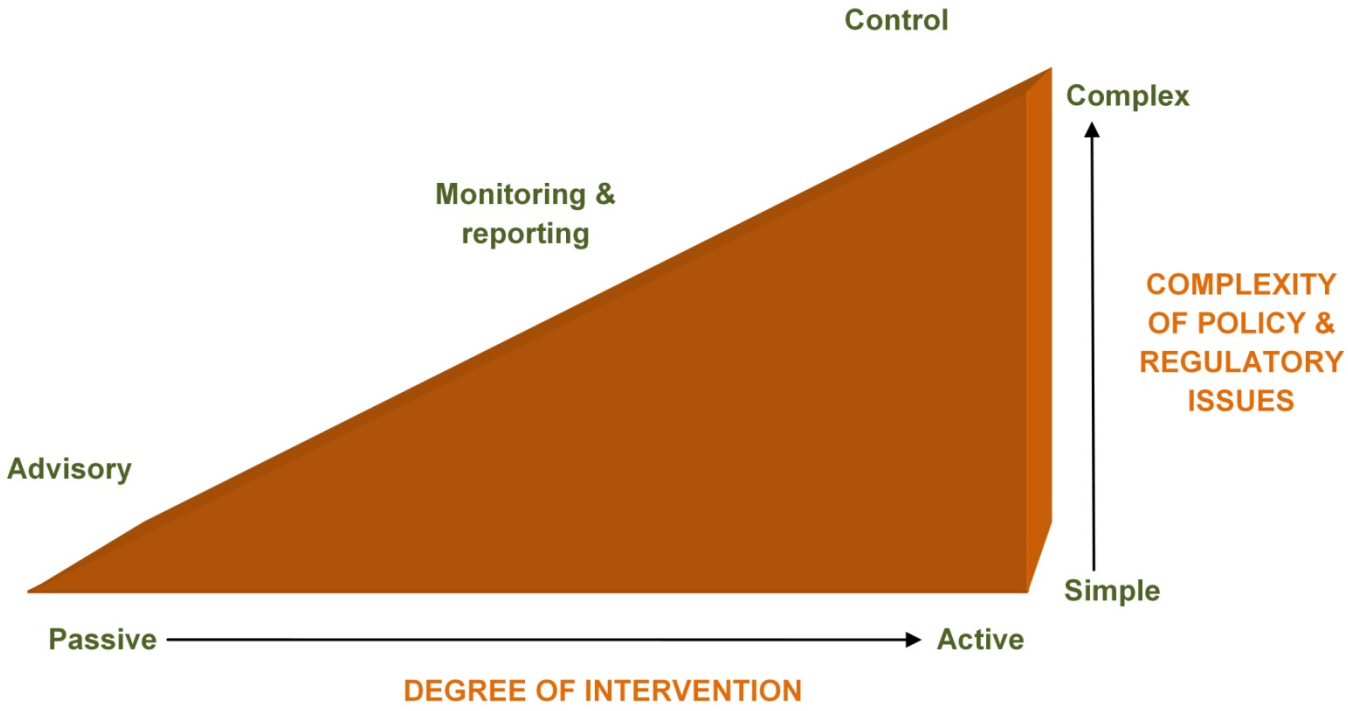


Monitoring & reporting

- Vehicle non-compliance reported to agencies
- Passive intervention
- May utilise features of advisory systems
- Driver retains full control of vehicle **BUT**

  there are consequences if driver does not comply

Options using IAP technology



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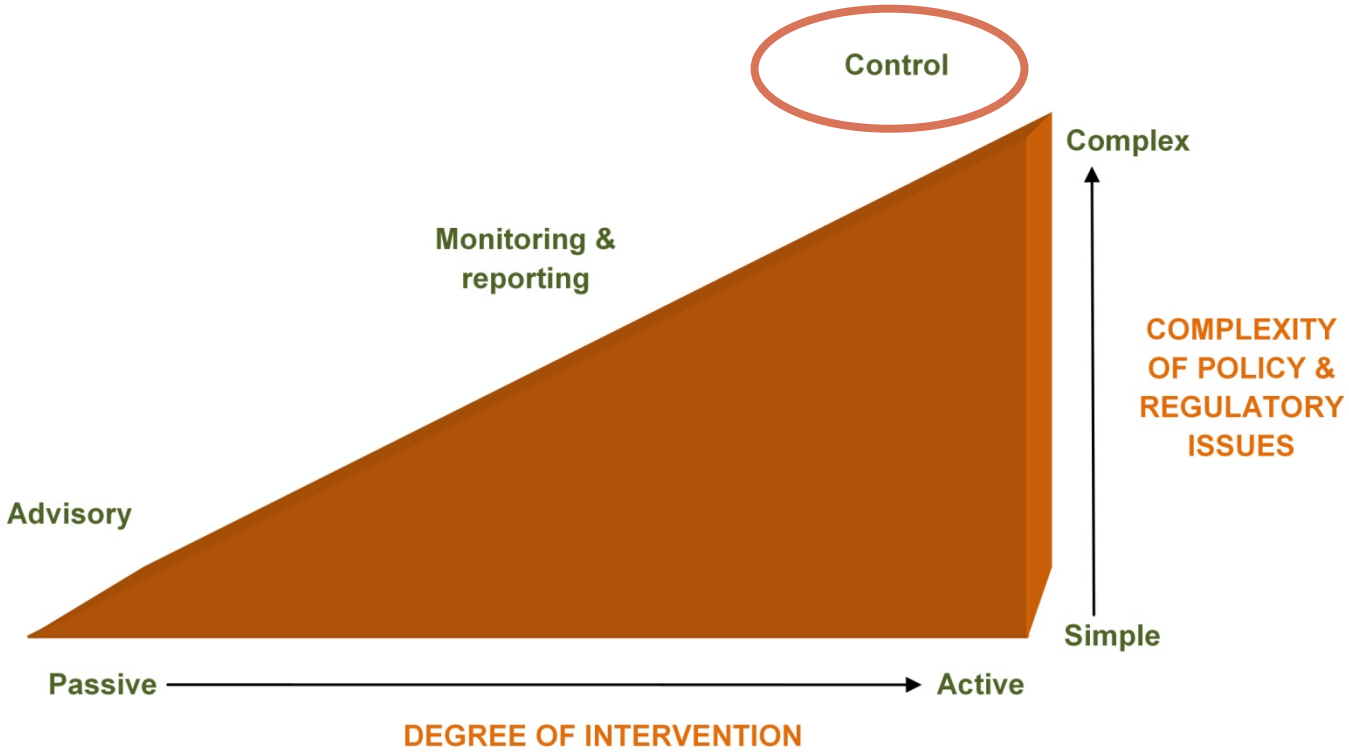
Options using IAP technology



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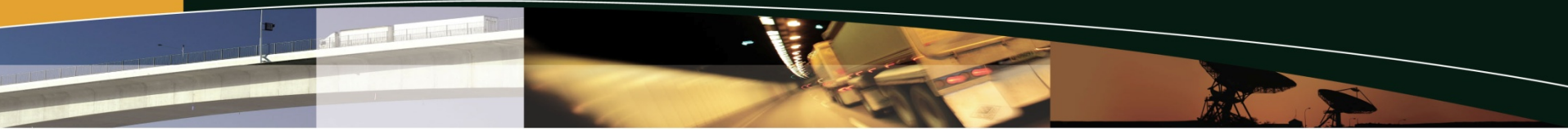
Option features



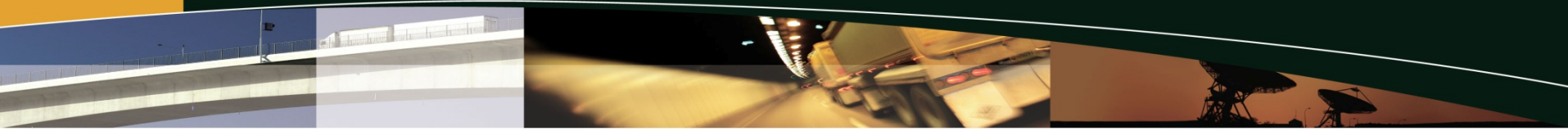
Control

- Active intervention
- System intervenes to ensure compliance

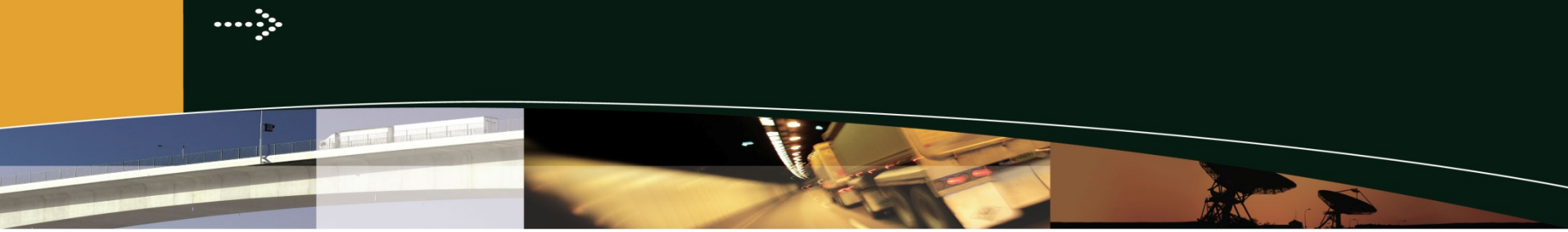
  e.g. speed of vehicle automatically managed by system

  system

Achieving a solution



- Technology is ready and at an affordable price
- We already have certified, accredited providers that can can provide regulatory solutions
- What is required is consideration of policy issues



Overview of Regulatory Telematics Solutions & Next Steps

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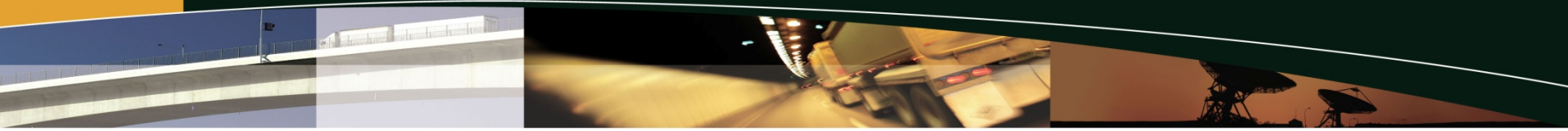
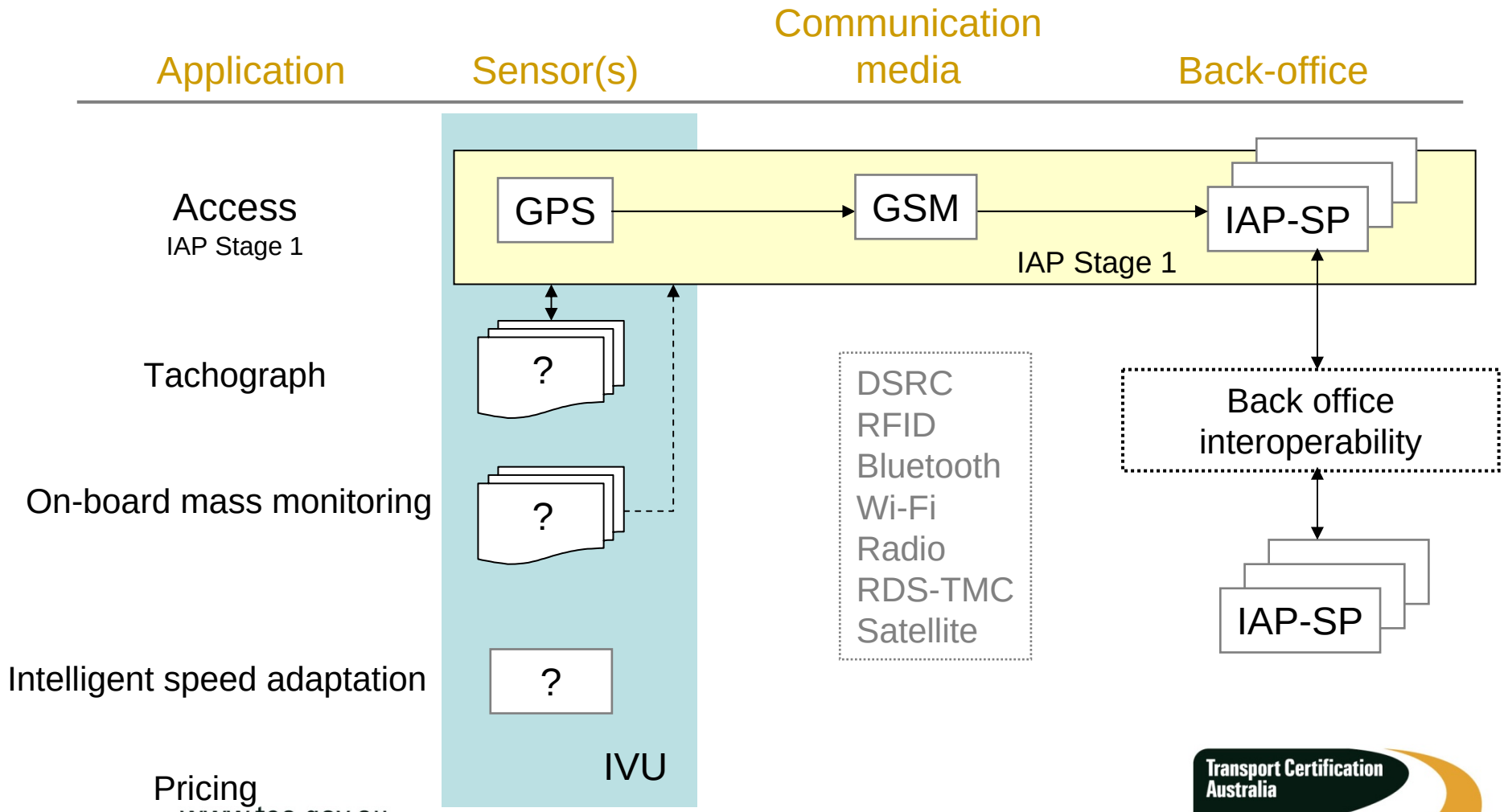
Solution overview





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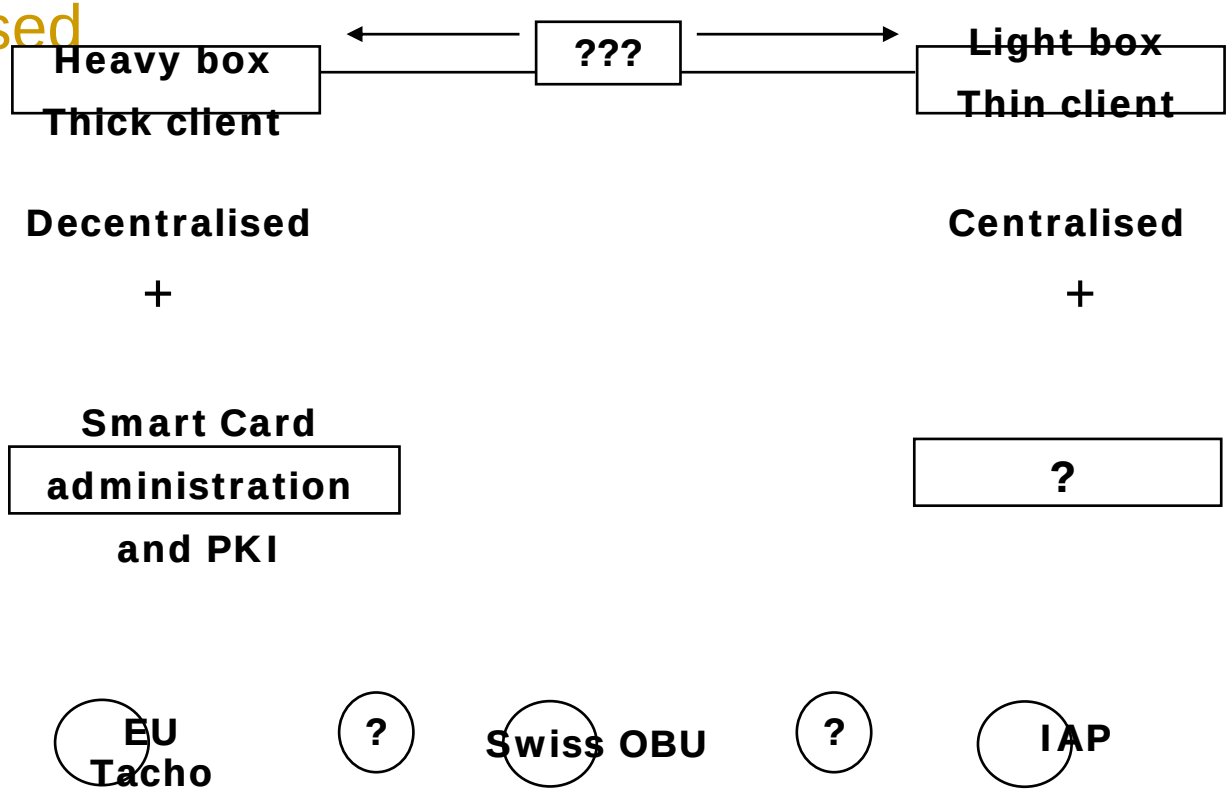
Choice of technical solutions

Autonomous

Centralised

Centralised



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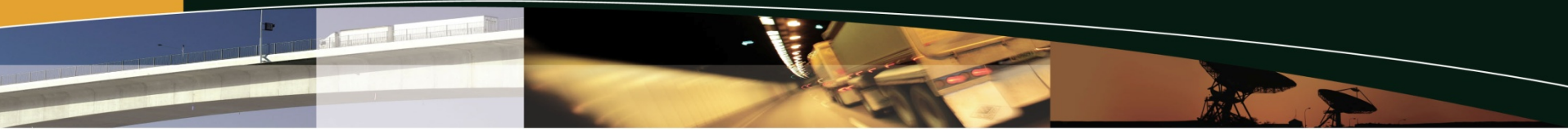
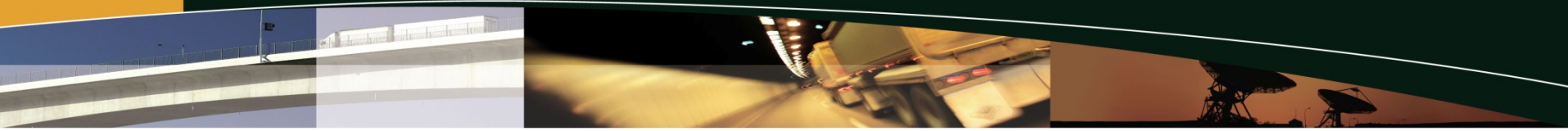
Railway level crossings



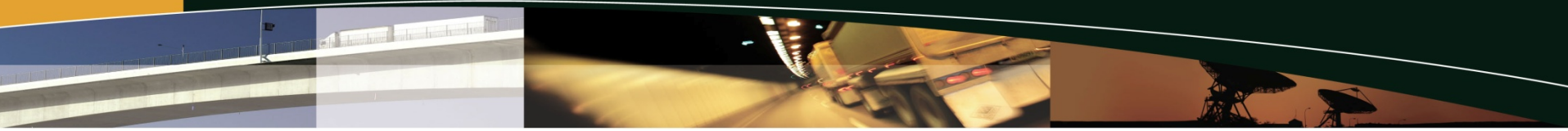
- Exclusion / inclusion zones
- Speed monitoring
- Communications coverage
- Passive warnings / active warnings / back office monitoring monitoring
- Real-time data on activation of lights at level crossings crossings

Next steps



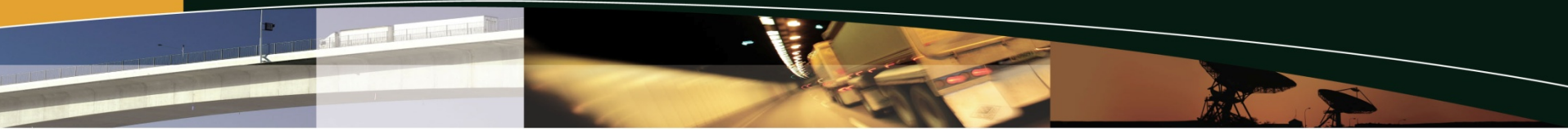
- Develop shortlist of options utilising IAP
- Assess options
    - Technical, economic and stakeholders
- Recommend preferred choice

Cost of an IAP solution



- 70,000 vehicles (6+ axles)
- $1000 in-vehicle unit
- $70 million capital cost
- Operating cost per unit per month $5-10
- $3.5 – 7.0 million pa

Thank you



- Questions
- Contact point:

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0412 241 692