

Automatic Traffic Enforcement Strategies

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possibilities...

UNECE November 26, 2009

Agenda

- » **Introduction**
- » **Automatic Traffic Enforcement**
- » **Procurement models**
- » **Conclusion**

Introduction

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Introduction

The following presentation is based on experience from the traffic enforcement market of implementation of automatic enforcement systems around the globe

Introduction Sensys Traffic AB

- » Traffic Safety and ITS – primarily speed and red light enforcement systems
- » Market leader in Scandinavia and the Middle East
- » Final customers are primarily the Police and Road Administration
- » Listed on Nasdaq OMX Stockholm
- » Part of the Vision Zero Initiative

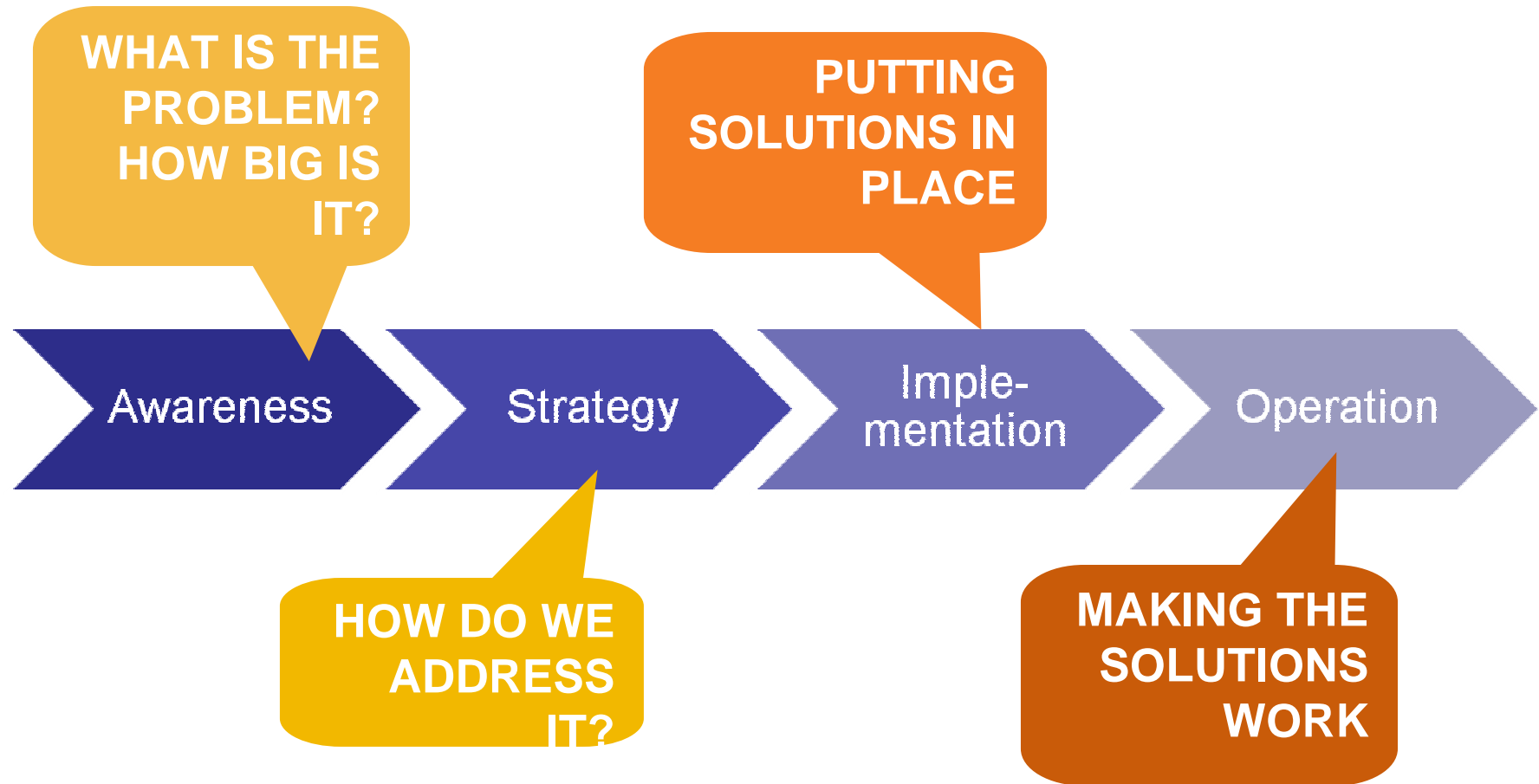


Photo: Lars Lindström/SRA

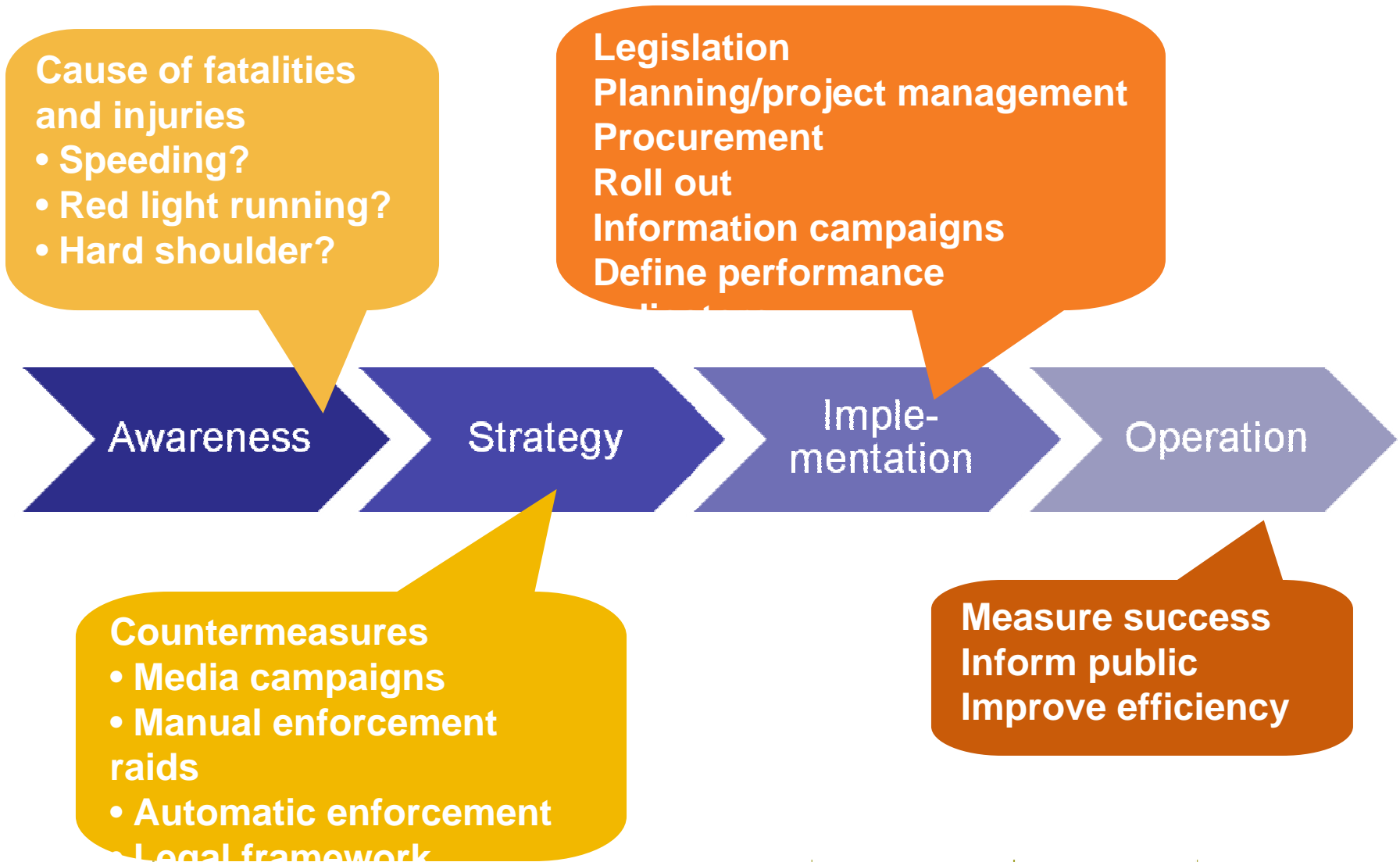
Automatic Traffic Enforcement

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National Traffic Safety Process



Automatic Enforcement System



Automatic Traffic Enforcement

Enforcement of

- » Speeding
- » Red light running
- » Truck/bus speeding
- » Hard shoulder running
- » Work area speeding
- » School zone speeding

Addressing

- » Driver behaviour
- » Driver stress
- » Driver safety
- » Accessibility
- » Pedestrian safety
- » Road worker safety
- » School children safety

Two different enforcement strategies

Supportive

- » Main objective to reduce fatalities
- » Reduce average speed
- » Visible cameras with signs
- » Addressing public acceptance
- » Changing driver behaviour
- » Builds on the public understanding the reasons for the system
- » Legal security is key in technology

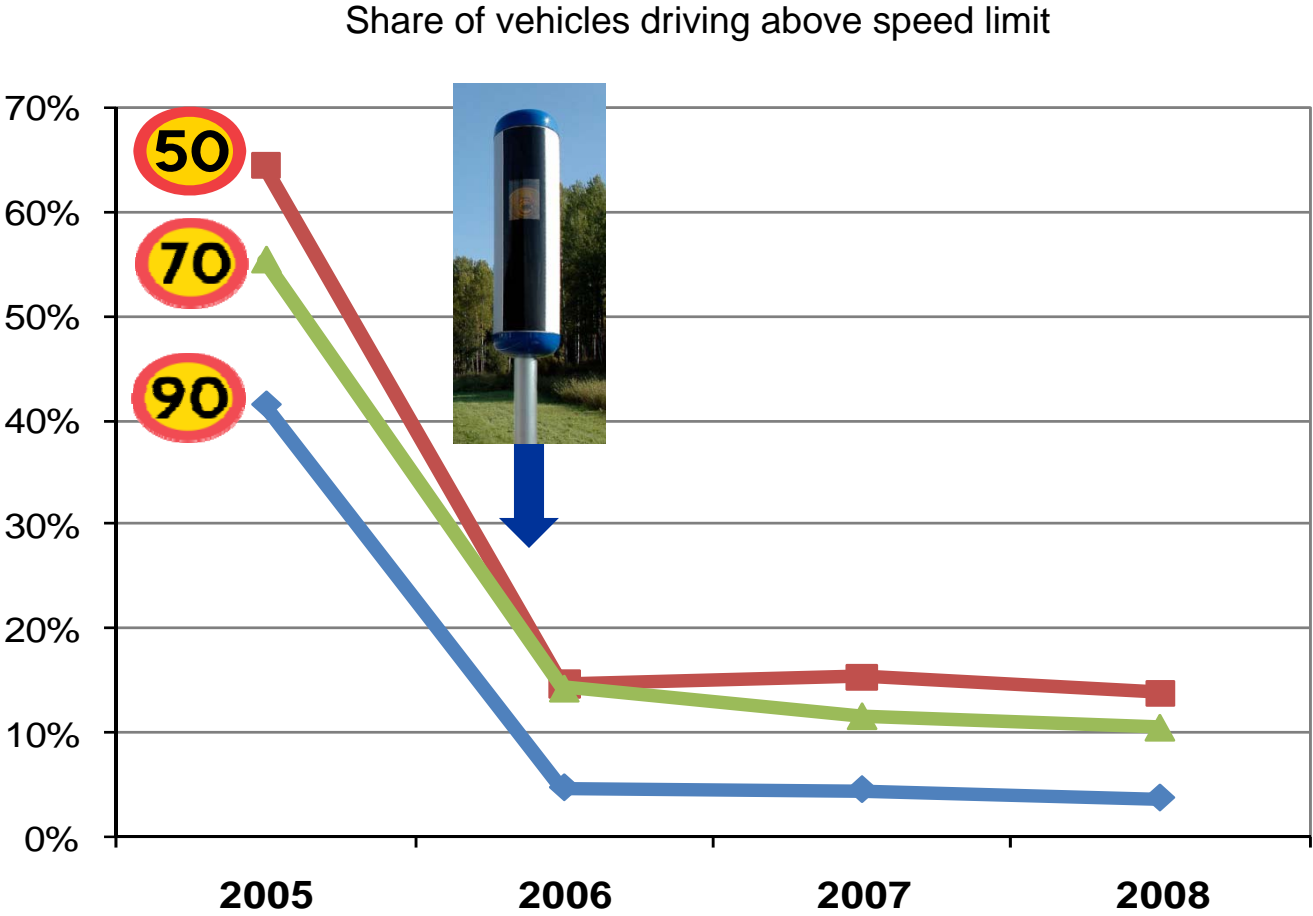
Repressive

- » Main objective is to maximize number of issued tickets
- » Maximize revenues
- » Covert cameras, surprise element
- » Enforcing speed limits
- » Penalizing driver behaviour
- » Builds on the public being made aware by friends that have been caught
- » Performance in volume of violations is key in technology

Ex.: Supportive strategy - ATK in Sweden

- » Information campaigns – the Swedish Life Saver
- » 1,070 systems on secondary roads with high fatality rates
- » 10 buses and 15 trailers mobile systems
- » Signs before cameras
- » Reduction of average speed of 6-9 km/h
- » Reduction of fatalities with 20-30 lives per year
- » Reduction of CO2-emission by 25,000 tons per year
- » Acceptance >70% of the population approve to the use of speed cameras (ATK)
- » Issuing just over 100,000 tickets per annum

Ex.: Supportive strategy ATK in Sweden



Source: SRA

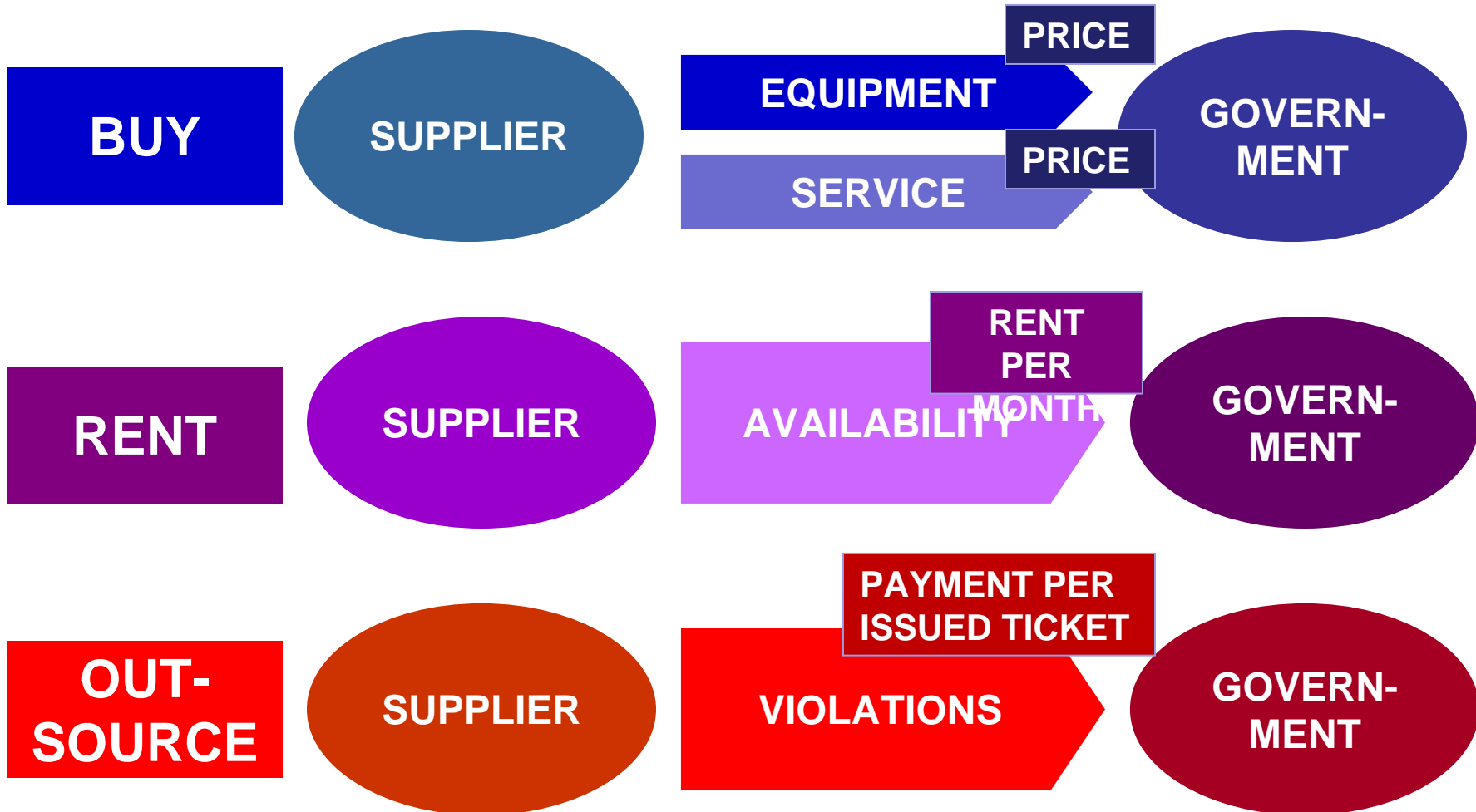
Procurement Models

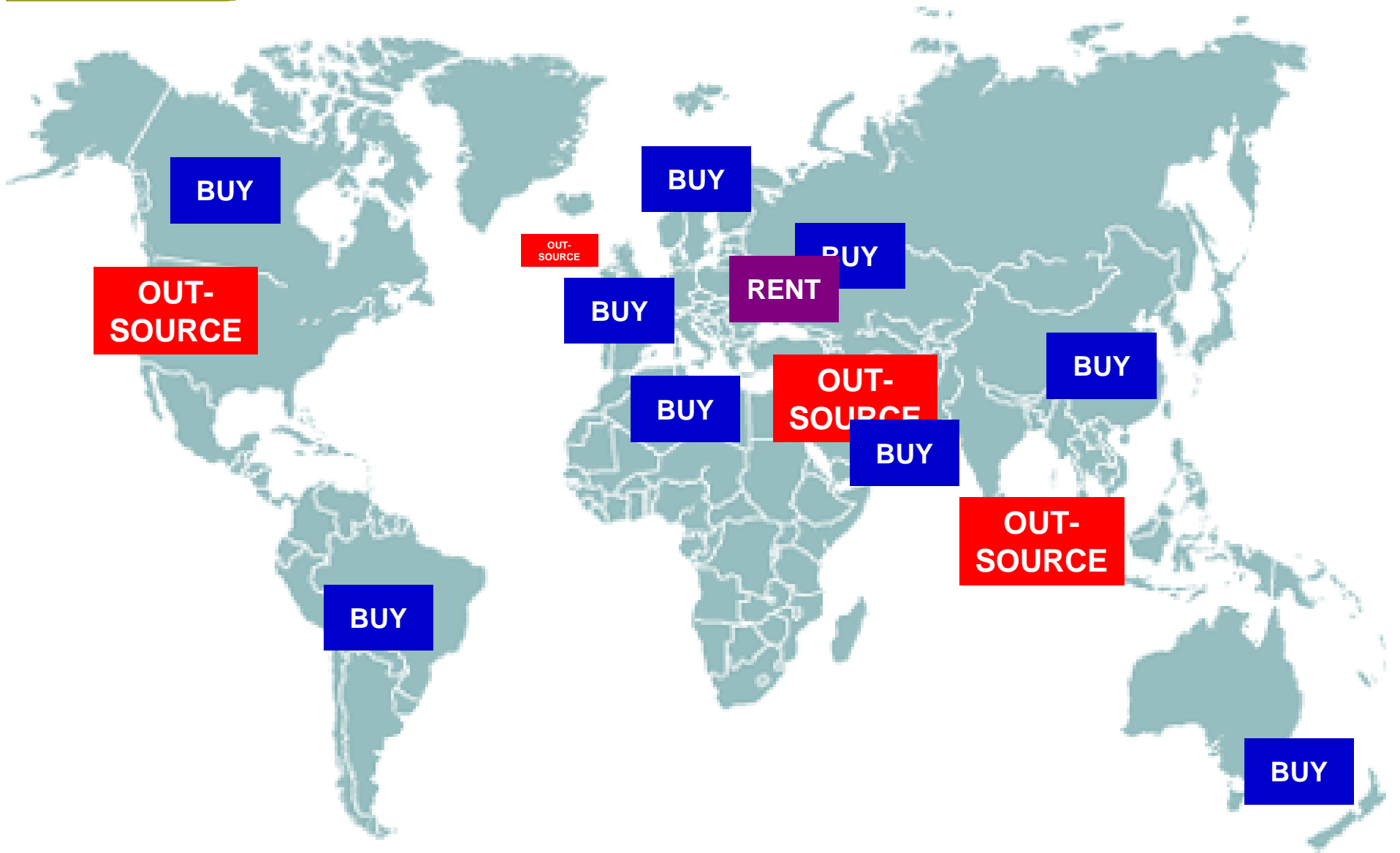
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Procurement models

- » **There are different procurement models for enforcement systems depending on**
 - **Financial status of the country**
 - **Culture in the country**
 - **Government vs private**
- » **The procurement model will most likely impact the ability to reach target on reduction of fatalities**

Procurement models





Outsourcing model



Outsourcing strategy

» If outsourcing is used

- Reduce goal conflict risk by specifying rules clearly
- Define violations clearly
- Define quality measures in contract to follow-up
- Define termination clause in contract for both parties
- Require signs before enforcement cameras

» Alternative, combined revenue model

- Fixed monthly fee to cover equipment cost over 2,3 or 5 years
- Processing efficiency dependent fee, to cover operational cost
- Performance based upside fee based on performance against target, eg. reduced average speed
- Percentage of violation fees

} Balance

» Alternative, rental/lease contract or service contract

Example of rules that need to be specified clearly

» Speed

- How much above speed limit is enforceable?
- Where to locate cameras?

» Red light - evidence

- Grace time?
- Location of car in first picture?
- Location of car in second picture?
- Right turn on red?

Example Redlight Enforcement

Date	Time	Sitecode
2008-11-20	22:04:23.5	JED008
Radar ID	Speed	Sign S
9F96EC0E0000	29.0 km/h	70 km/h



Conclusion

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Conclusion

- » **Automatic enforcement is a very effective traffic safety measure**
- » **Supportive strategy is most likely more effective**
- » **Buy or rent/lease equipment**
- » **Avoid outsourcing model if traffic safety is main priority**
- » **If outsourcing is used and traffic safety is still main objective**
 - **Use alternative revenue models**
 - **Define rules and payment criteria very clear in contract**
 - **Require signs before cameras**
 - **Include an escape clause in the contract**
- » **Specify legal security to insure proper technology**

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Thank you!

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