

Automated Speed Enforcement

Deploying Intelligent Transportation Systems

Deploying Intelligent Transportation Systems

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Introduction



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Introduction

- Maintaining sufficient enforcement levels due to limited manual enforcement resources
- Road safety requires 24/7/365 approach
- Use police resources for 'non-automatable' tasks
- Reduce 'fine leakage' and restoring enforcement



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Objectives



- Secure strong political, administrative and public support for road safety and enforcement
- Create an enforcement environment with a high subjective chance of apprehension
- Reduce the average speed across various road types in the network with different types of road safety interventions
- Avoid and counter any link with 'revenue generation' and 'taxes'
- Actively communicate reasons, benefits and results of road safety enforcement

Technology Brief

3P







GLOBAL











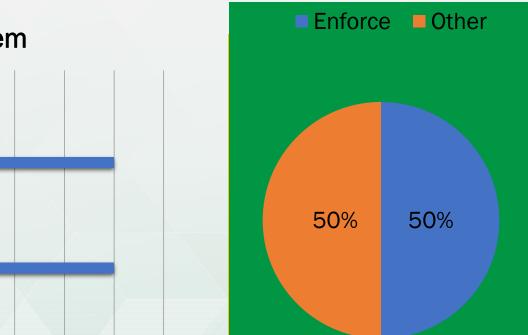


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Enforcement efficiency



Pack system Drive to location 1 Setup system Enforce Pack system Drive to location 2 Setup system Enforce Pack system Drive to station **Unpack system**

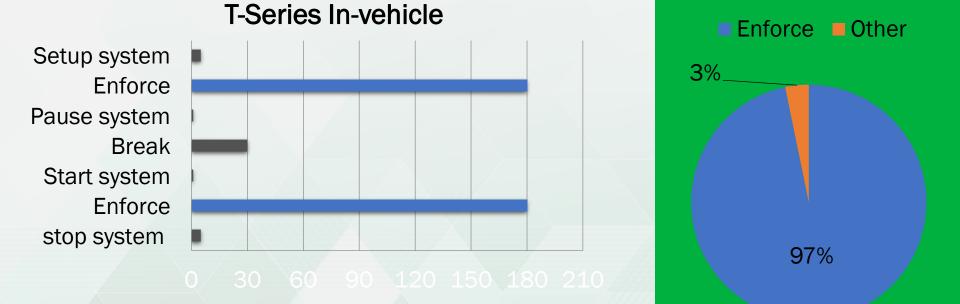
Mobile tripod system

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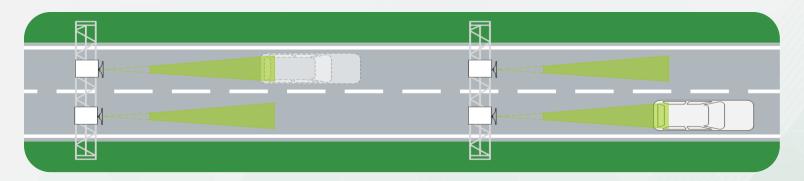
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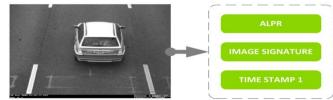
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Average speed enforcement









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Example Match



T1 = 38.295 sec. T2 = 38.298 sec. Distance=1500m \rightarrow V1 = 141,0 km/h Distance=1500m \rightarrow V2 = 141.0 km/h



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Two automated enforcement models

- Government buys enforcement and back office equipment and manages and executes ticket issuance and fine collection process.
- Government sets PPP criteria and leaves enforcement operation up to a private party .





STATEMENT OF POLICY

by the International Road Federation

"Public Private Partnerships in Traffic Enforcement"

July 2, 2015

In most countries traffic enforcement cameras and other equipment are purchased, owned, and operated by government organizations. The past two decades have seen a wide-ranging wave of privatizations and introduction of public private partnerships (PPP) in formerly government-owned or controlled activities, including traffic enforcement. Implementing this concept requires a set of principles and good practices presented in this IRF policy statement.





Public Private Partnerships in Traffic Enforcement

A White Paper from the International Road Federation



PPPs in Traffic Enforcement

Guiding Partnership Principles

- Transparency
- \circ Integrity







PPPs in Traffic Enforcement

Key preparations, issues and actions

- Road safety study with action plan
- Actions: infrastructure changes, publicity campaigns, school safety programmes, signage, etc.
- Enforcement cameras for irresolvable road safety issues
- Confirm compliance with preconditions
- $\circ\,$ Define public-private partitions and tasks in the process

PPPs in Traffic Enforcement Preconditions

- Strong political and administrative commitment
- Suitable legal and regulatory framework
- Police cooperation and public party alignment
- Administrative level: national, regional or local
- Accurate vehicle registration database
- Access by private party to such data
- License plate issuance, presence and quality
- Sufficient fine levels
- Strict & enforceable fine collection conditions

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PPPs in Traffic Enforcement

Public party

- No or minimal investment
- Competition & better resource allocation
- Alternative use of capital
- Improves enforcement integrity
- Safer roads and intersections
- Better quality of life for its residents (noise, emissions, barrier effects)
- **o** Administrative alignment required
- Violator pays for road safety

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PPPs in Traffic Enforcement

Private party

- Main investor
- Discussions with private parties on hardware, software and operational scope of project
- Data access, privacy and private party staff authorisations
- Road safety objectives and camera rotation
- Operation funded with fines
- Define late, non-payment, legal and court procedures



Ultimate control and approval of violations only by police or authorised official





 Independent type approval and regular verification of accuracy and overall processes and performance

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Surplus fine revenue to be reinvested into road safety projects



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- Longer term contract with capped revenue
- Maintain lower financial incentive to continue

to issue tickets beyond cap

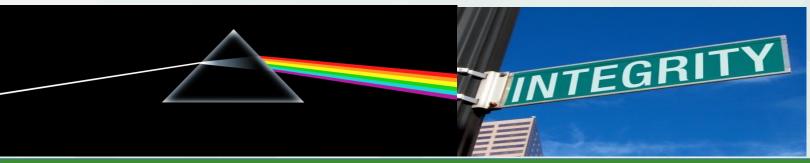


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Transparency and Integrity

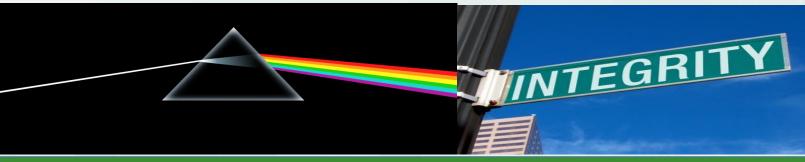


- $\circ\,$ Transparency and integrity defining elements of PPP success
- Early stage publicity about enforcement PPP plans
- Objective: road safety, saving lives, QoL, never revenue driven
- Inform public well in advance to create support: objectives,
 - safeguards, private party role, surplus fine allocation, etc.



Transparency and Integrity

- Internet access to review e.g. photo, video, violation data, approvals
- Integrity: type approval, annual verification, authorising officer, full process auditing
- $\circ\,$ Inform: why, where and results of enforcement











- Enforcement PPPs offer an innovative way to improve road safety
- **o** Joint initial action by politics, public administration and police
- Road safety plan and crash and casualty stats determine camera locations
- Independent type approval & annual verification of enforcement equipment and full enforcement process
- Police stays in control approving all violations

Summary-2



- \circ $\,$ No open ended revenue , above cap restricted fees
- Maintain firm road safety focus: any revenue based Enforcement
 PPPs cannot claim long term success
- All surplus fine revenue reinvested into road safety improvements
- Maintain transparency, integrity, continued publicity on background and results of Enforcement PPPs

Suitable enforcement technologies



- Information on speed camera locations is everywhere
- Counter the Kangaroo effect
- Best road safety effect of enforcement: Optimise the subjective chance of apprehension
- Two technologies address this issue: average speed enforcement and unmarked in-vehicle enforcement

Thank you for your attention



Please refer to the IRF 'Statement of Policy', webinar and white paper on Public Private Partnerships in Traffic Enforcement on the IRF website:

www.irf.global

Contact and further information: IRF Road Safety Enforcement