



Safer Road Infrastructure and Speed Control

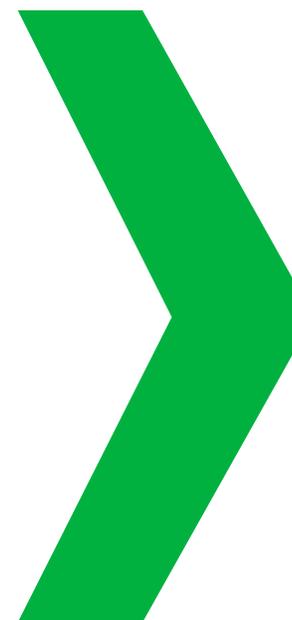
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UN Transport Legal Instruments A tool for better Road Safety Management

Palais des Nations
Geneva, Switzerland
5-7 July 2017

Philip J. Wijers
Director Government Affairs - Sensys Gatso Group
Chair IRF Road Safety Enforcement Subcommittee



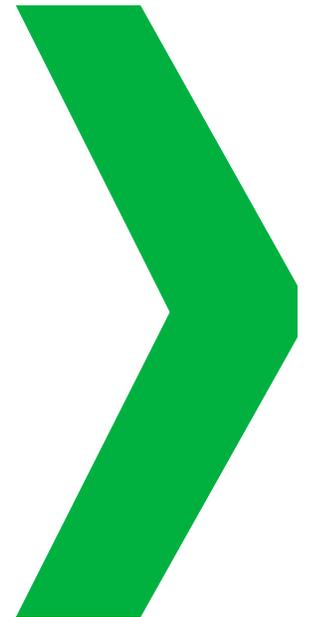
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Introduction

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Why is speed so important ?

“A 1% reduction in mean speeds leads to a 2% reduction in injury accidents, a 3% reduction in serious injury accidents and a 4% reduction in deaths.” (Aarts, L. & van Schagen, I. (2006), based on Nilsson (1982))

“It is estimated that speeding contributes to as many as one third of all crashes resulting in death, and is the most important contributory factor to road deaths and serious injuries.” (ETSC 2008)



Introduction

Do you remember high school physics?

$$E_k = \frac{1}{2}mv^2$$

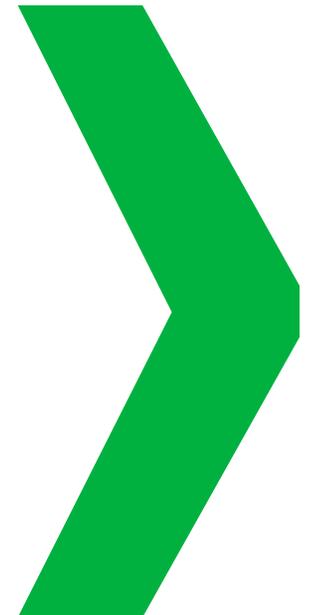
In which the kinetic energy of an object is equal to half the mass multiplied by the squared speed of that object.



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Introduction

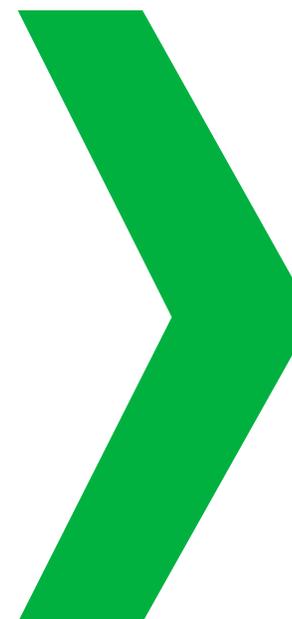
Key issues speed management

- Reduce the average speed across all road types in the network
- Focus on urban areas which have a high percentage of vulnerable road users (max 50 km/h)
- Special focus on residential areas where motorised vehicles should be seen as 'guests' (max 30 km/h)
- Speed management and road safety important contributors to higher quality of life and urban sustainability (noise, emissions, barrier effects)

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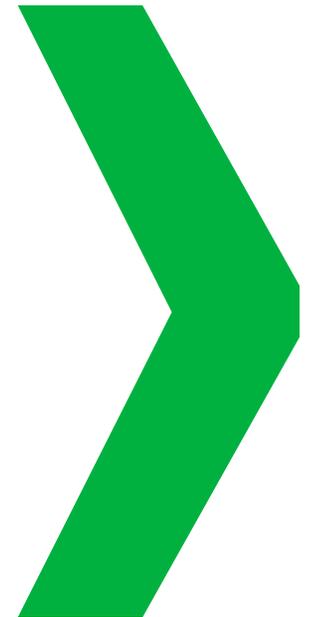
Speed management measures

- Building or changing roads with traffic calming measures
- Matching the speed limit to the function of road
- Informing speed limits by signage
- Enforcing speed limits
- Publicity to increase the awareness on the dangers of speeding
- Promoting in-vehicle speed limiting technologies

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Traffic calming: Optical illusion markings



Traffic calming: Humps and plateaus



Traffic calming: Roundabouts

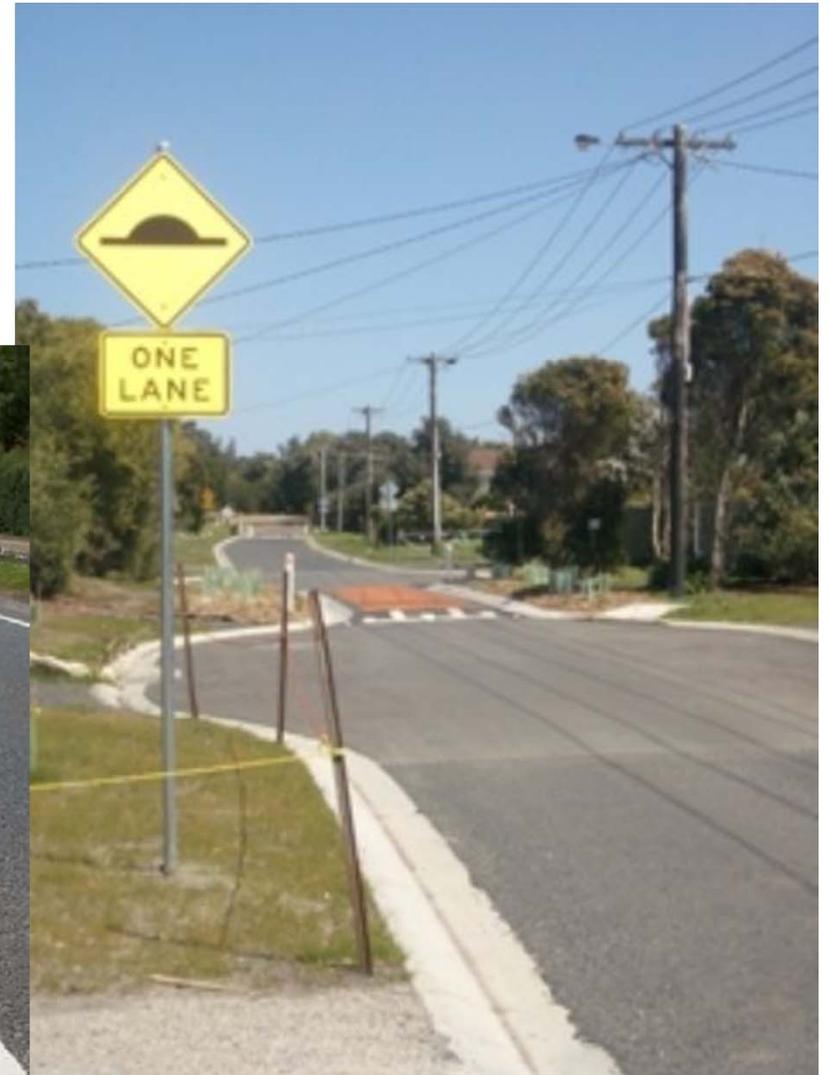


Traffic calming: Gateway treatments

Welcome to a new speed regime.



Traffic calming: Road narrowing



Matching speed to road function:

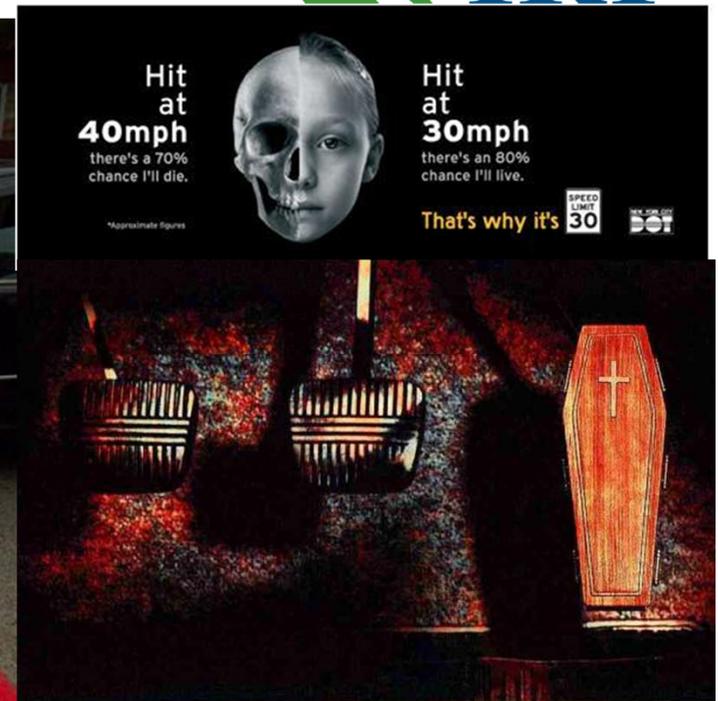
Speed changes due to function
Road layout tells speed regime



Information: Signage



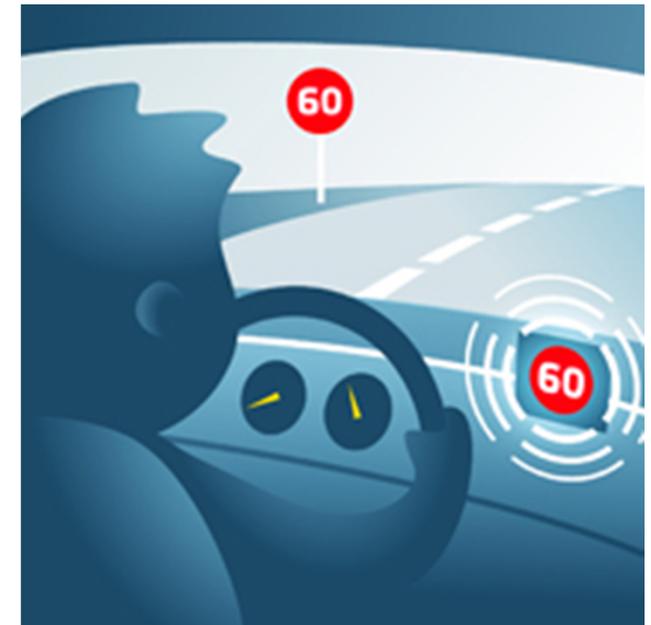
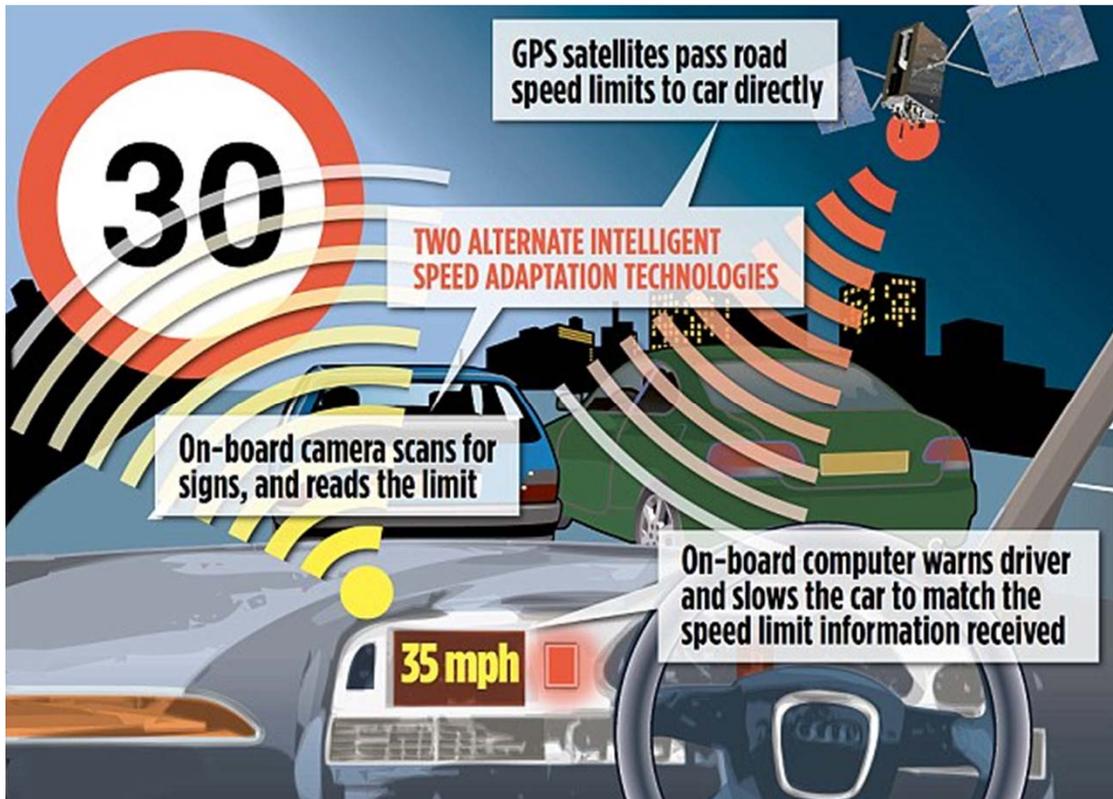
Creating awareness by publicity Campaigns



In-vehicle technologies

Intelligent Speed Adaptation

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Speed enforcement

Introduction

- Rising motorisation: maintaining enforcement levels
- Limits to manual police enforcement
- Speed management requires 24/7/365 approach
- Use valuable police resources for 'non-automatable' tasks
- Authorities & NGOs aware of need automated enforcement
- Automated enforcement benefits 'fine leakage'
- Implementation is challenge for many governments



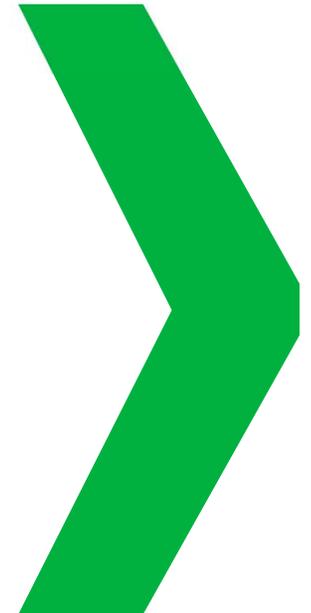




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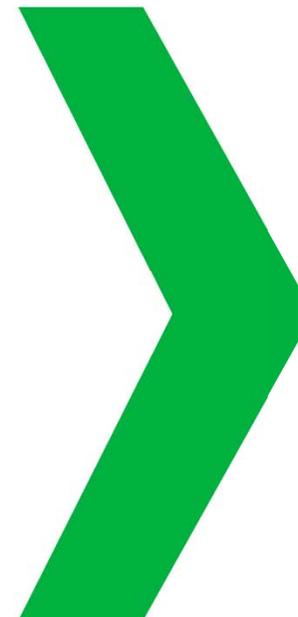




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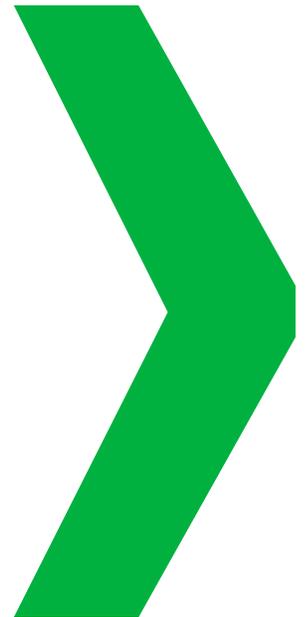
Preconditions

- Political, administrative & public commitment
- Proper legal and regulatory framework
- Firm choice for owner or driver liability
- Procedures to ease burden on the judiciary
- Strict & enforceable fine collection conditions
- Accurate vehicle and drivers license database
- License plate issuance, presence and quality
- Sufficient fine levels
- Suitable Publicity infrastructure



Two 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 with violation confirmation by the police.**





STATEMENT OF POLICY

by the International Road Federation

“Public Private Partnerships in Traffic Enforcement”

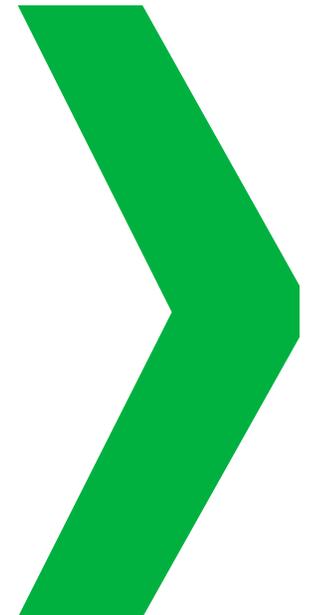
July 2, 2015

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.



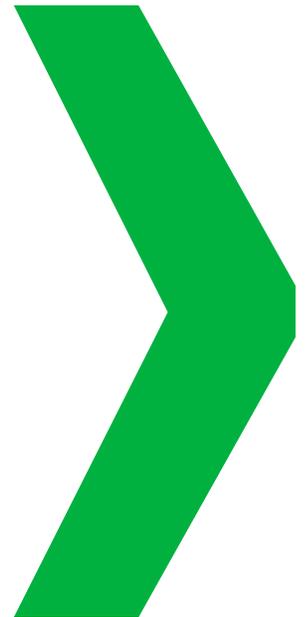
Public Private Partnerships in Traffic Enforcement

A White Paper from the International Road Federation



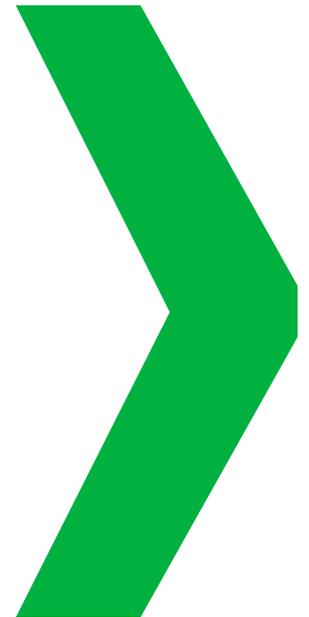
PPP - Public party

- Easy on constrained budgets
- No or minimal investment, alternative use of capital
- Better on police resource allocation
- Improves enforcement integrity
- Violator pays for road safety
- Safer roads and intersections
- Better quality of life for its residents (noise, pollution, barrier effects)



PPP – Private party

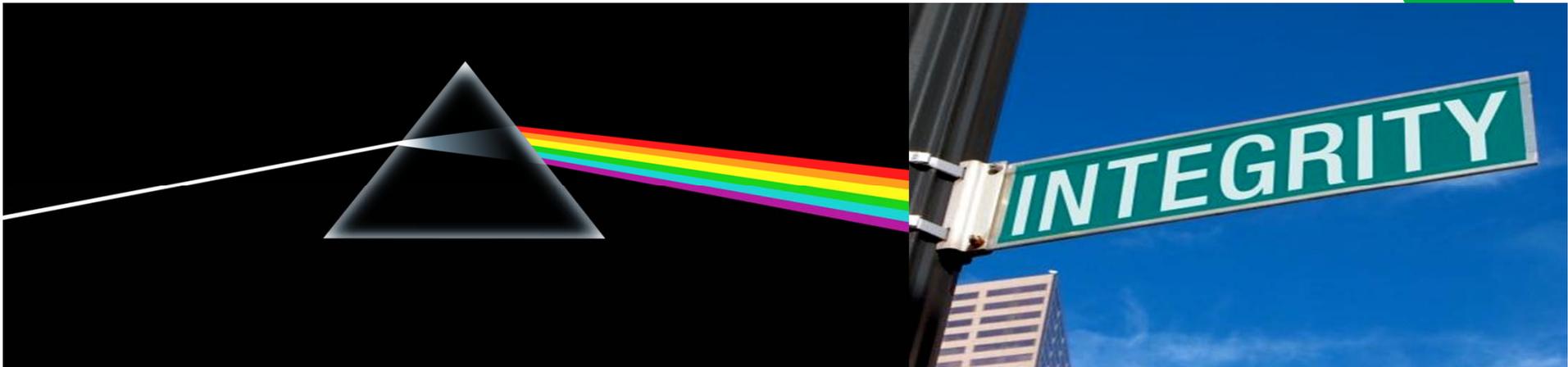
- **Main investor**
- **Operation funded with collected fines**
- **Discussions with private parties on hardware, software and operational scope of project, public – private cut**
- **Define late, non-payment, legal and court procedures**
- **Privacy and private party staff authorisations**
- **Road safety objectives and camera rotation**



PPPs in Traffic Enforcement

IRF's Guiding Project Principles

- Transparency
- Integrity



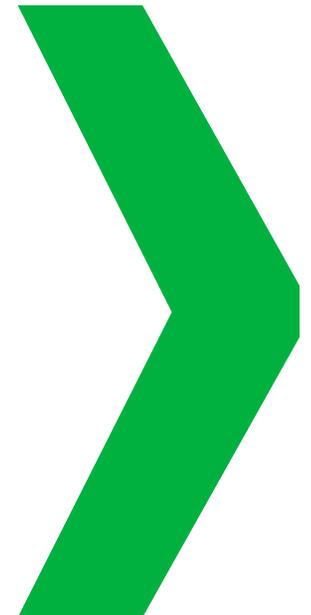
Key preparations, issues & actions

- Political and administrative commitment
- Government authority, police and private parties
- Administrative scope: municipal, regional, national
- Study and identification of high-risk spots and road

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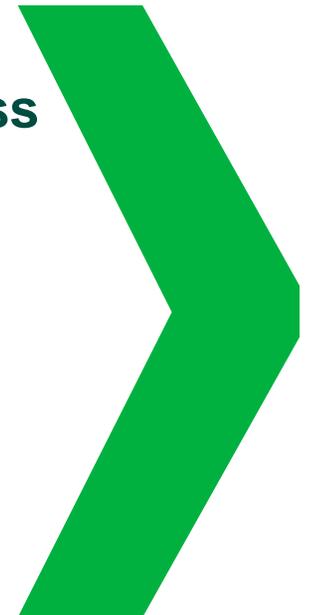
sh statistics



Key preparations, issues & actions

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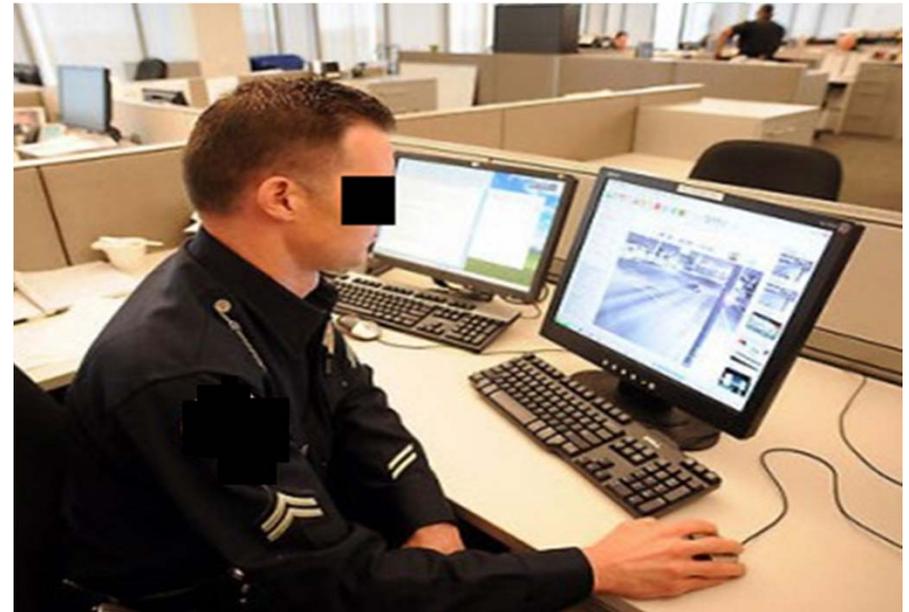
- Road safety study with action plan
- Actions: infra changes, campaigns, signage, etc.
- Enforcement cameras option for other speeding issues
- Define the public-private partitions and tasks in the process
- Confirm compliance with preconditions



Safeguards, checks and balances



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



Safeguards, checks and balances

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

NMI voorlopige Verklaring

Nummer TP8290 revisie 0
Projectnummer 12200713
Blad 1 van 6

Afgegeven door NMI Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht

Ingevolge De *concept voorschriften meetmiddelen politie, versie 2010-08-09*

Aanvrager Gatsometer B.V.
Claes Tillyweg 2
2031 CW Haarlem

Aangeboden Een model van een **radarsnelheidsmeter**
Fabrikaat : Gatsometer
Type : T-Series
Aanwijsbereik : 20 km/h - 250 km/h
Categorie : Categorie A

Geldig tot Definitieve versie voorschriften meetmiddelen politie.

Beschrijving en documentatie Het model wordt weergegeven door de beschrijving TP8290 revisie 0 en de documentatiemap TP8290-1 die bij deze verklaring behoren.

Opmerking Dit document moet niet worden beschouwd als een typekeuringscertificaat zoals bedoeld in de concept voorschriften meetmiddelen politie.

De aangewezen instantie,
NMI Certin, 3 mei 2013

[Handwritten Signature]
D. Doornik
Hoofd Certificatiebestuur

NMI Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
Postbus 206
3300 AZ Dordrecht
T 078 6 251 232
F 078 6 251 209
certificeren.nl
www.nmi.nl

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tegenwoordig.

INSPECTIE
RVA 1172

Safeguards, checks and balances

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- Surplus fine revenue to be reinvested into road safety projects



UGANDA POLICE | Traffic & Road Safety Department



LET US WORK TOGETHER TO
#SaveLivesUG

Do not be impatient or angry in traffic. Be considerate to other road users and avoid bad habits such as changing lanes without indicating, overtaking in tight spots, and hooting your car horn.

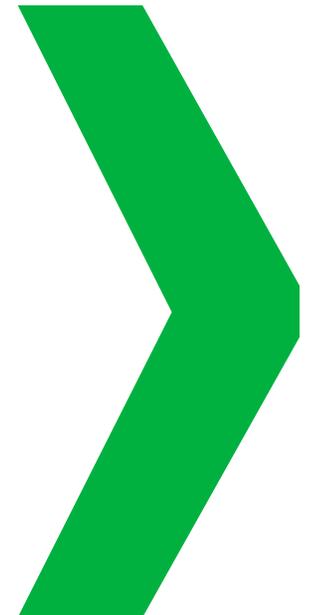


Supported by: MEDIA ANALYST nomad

Safeguards, checks and balances

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- Longer term contract with capped revenue
- Maintain lower financial incentive to continue to issue tickets beyond cap



Transparency and Integrity

- 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 about safeguards, private party caps, surplus fine allocation, etc. to create and maintain support

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Transparency and Integrity

- Internet access to review e.g. photo, video, violation data, approvals
- Integrity: type approval, annual verification, authorising officer code
- Inform: why, where and results of enforcement
- **No effective enforcement without publicity**

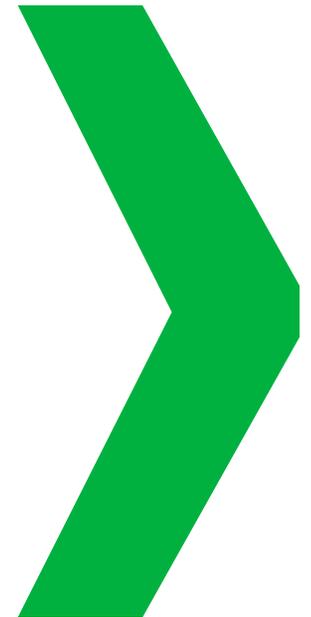


Conclusions

- Reducing average vehicle speed has huge road safety benefits
- Infrastructure adaptations
- Matching speed to road function
- Raise awareness for speed and enforcement through publicity
- Manual and automated enforcement
- Consider IRF PPP enforcement model
- Speed reduction strongly benefits Quality of Life



IRF



Thank you for your attention

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Please refer to the IRF 'Statement of Policy', White Paper 16-02 and IRF Webinars on Public Private Partnerships in Traffic Enforcement and corruption on the IRF website:



www.irfnews.global

Contact and further information:

IRF Road Safety Enforcement Subcommittee or contact me at

Philip Wijers - p.wijers@sensysgatso.com

