

Road Safety on Rural Roads

International Road Federation Amsterdam InterTraffic 2024

Traffic Management and Safety: Reducing Accidents and Congestion

**Intertraffic Summit Theatre 2, Hall 7, RAI Amsterdam
16 April 2024**

Background

- Basis: Recent press release from ETSC with title:
10,000 killed on rural roads in the EU in 2022
This equals roughly 50% of total EU road deaths (20,400).
Safest countries have lower speed limits for rural roads.
- Excessive and inappropriate speed accounts for about 1/3 of fatal collisions and is an aggravating factor in most collisions.
- 2,100 lives could be saved annually if the average speed dropped by just 1 km/h on EU roads (ESTC).

Rural roads = Risky roads

Issues

- High speeds
- High speed differentials road users
- High weight differentials vehicles
- Long straight stretches
- Many obstacles (e.g. trees, posts, poles)
- Many single vehicle crashes (fatigue, distraction, misjudgement)
- Lacking guard rails and side barriers
- No median or central divider
- Risky cross-intersections
- Shared infrastructure with VRUs
- Dangerous when overtaking
- Many head-on collisions

Rural roads = Risky roads

Risky roads, strategic vision, complex solutions

- Largest, longest part of the road network
 - E.g. France 1.1M total, only 30,000 km motorways and national roads
 - US 4.1 M total: 70% rural, 25% urban (pop. >5,000), 5% primary roads
 - India 86% rural, 9% urban (pop. >5,000), 5% primary roads

Due to network length expensive to adapt and equip with safety features

- Infrastructure and road side adaptation
- Enforcement
- Vehicle technology
- Communication and education



Infrastructure & roadside adaptation

Interventions

- Gateway treatments
- Road narrowing
- Chicane
- Roundabouts
- Speed humps
- Speed tables
- Rumble strips
- Road and optical markings
- Center island and raised median
- Guard rails
- Roadside clearance and obstacle policy
- Snap poles

Enforcement

Options

- Introduce automated enforcement based on owner liability
- Strategically mix manual and automated methods
- Optimise the subjective chance of apprehension
- Regularly change enforcement locations (mobile, in-vehicle)
- Use average speed enforcement
- Link collected fine revenue with road safety investments
- Progressive fines increasing with the number of violations
- Focus manual enforcement on non-automatable violations
- Centralise fine revenue collection
- Shorten violation notification (e.g. SMS)



Semi-fixed enforcement





90



Serial nr: **GATSO** Location: Gatso Date: 2012-09-12 Time: 13:49:37.602

nr	Date	Time	OffenceType	OwnSpeed	DifferentialSpeed	VehicleSpeed	VehicleDirection	Elapsed
# 382	2012-09-12	13:49:35.998	speed	71.2 km/h	147.3 km/h	76.1 km/h	approaching	1.604
# 381	2012-09-12	13:49:34.864	speed	72.4 km/h	135.6 km/h	63.2 km/h	approaching	2.738
# 380	2012-09-12	13:49:33.958	speed	71.6 km/h	152.3 km/h	80.7 km/h	approaching	3.644
# 379	2012-09-12	13:49:32.698	speed	72.2 km/h	152.2 km/h	80.0 km/h	approaching	4.903







Sensys
Gatso
Group

Communication and Education

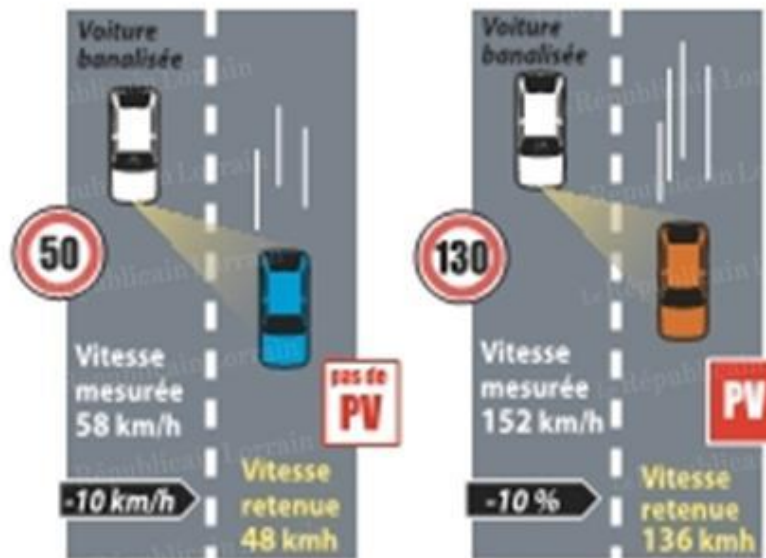
Issues

- Often underestimated
- Multi-media
- Multi-target audience
- Integrate with infrastructure and enforcement measures
- Requires regular repeat efforts and continuity
- Use to communicate results of other road safety measures

Multi-media campaigns

Nouveaux radars mobiles contre les excès de vitesse

20 nouveaux modèles entreront en service le 15 mars 2013



En 2011
plus de **1 000** personnes tuées
à cause d'une **vitesse excessive**
14 622 condamnations
pour excès de grande vitesse

Mise en service des premiers radars



Véhicule photographié à - 100 km/h

marge technique : **-10 km/h**

vitesse limite	vitesse mesurée	vitesse retenue
50	61	51
70	81	71
80	91	81

Véhicule photographié à + 100 km/h

marge technique : **-10 %**

vitesse limite	vitesse mesurée	vitesse retenue
90	102	91
110	124	111
130	146	131

Source : Sécurité routière

AFF

Les radars embarqués

Voiture banalisée
conduite
par un policier
ou gendarme
en uniforme



3 La photographie
apparaît sur la tablette.
Envoi automatique du PV :
- Vitesse retenue / heure
- Coordonnées GPS
- Axe / Sens / Commune

2 Flash infrarouge
invisible (sur 3 voies)

Caméra

Radar

1 Un automobiliste
en excès de vitesse
la double

**20 radars
embarqués**
à partir du 15 mars
300 d'ici à 2015

À partir de quelle vitesse ?

En km/h

Limité à ▶



Flashé dès ▶

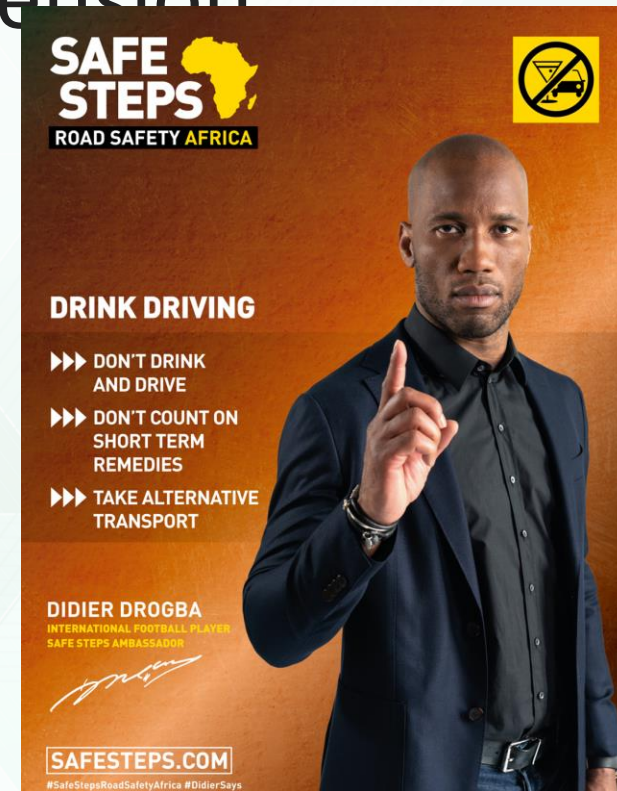


Source : Sécurité routière

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Summary

- Huge multi-intervention project
- Requires long term integrated and strategic vision
- Enforcement: Subjective chance of apprehension
- Gateway and roadside treatments
- Potentially great pay-off in results



SAFE STEPS
ROAD SAFETY AFRICA

DRINK DRIVING

- ▶▶ DON'T DRINK AND DRIVE
- ▶▶ DON'T COUNT ON SHORT TERM REMEDIES
- ▶▶ TAKE ALTERNATIVE TRANSPORT

DIDIER DROGBA
INTERNATIONAL FOOTBALL PLAYER
SAFE STEPS AMBASSADOR

SAFESTEPS.COM
#SafeStepsRoadSafetyAfrica #DidierSays

Thank you for your kind attention

Questions, comments, discussion?