SAFER AND CLEANER
USED VEHICLES

SAFER AND CLEANER USED VEHICLES FOR AFRICA

A project funded by the UN Road Safety Fund

Walter Nissler

Safer and Cleaner used Vehicles for Africa

Situation today

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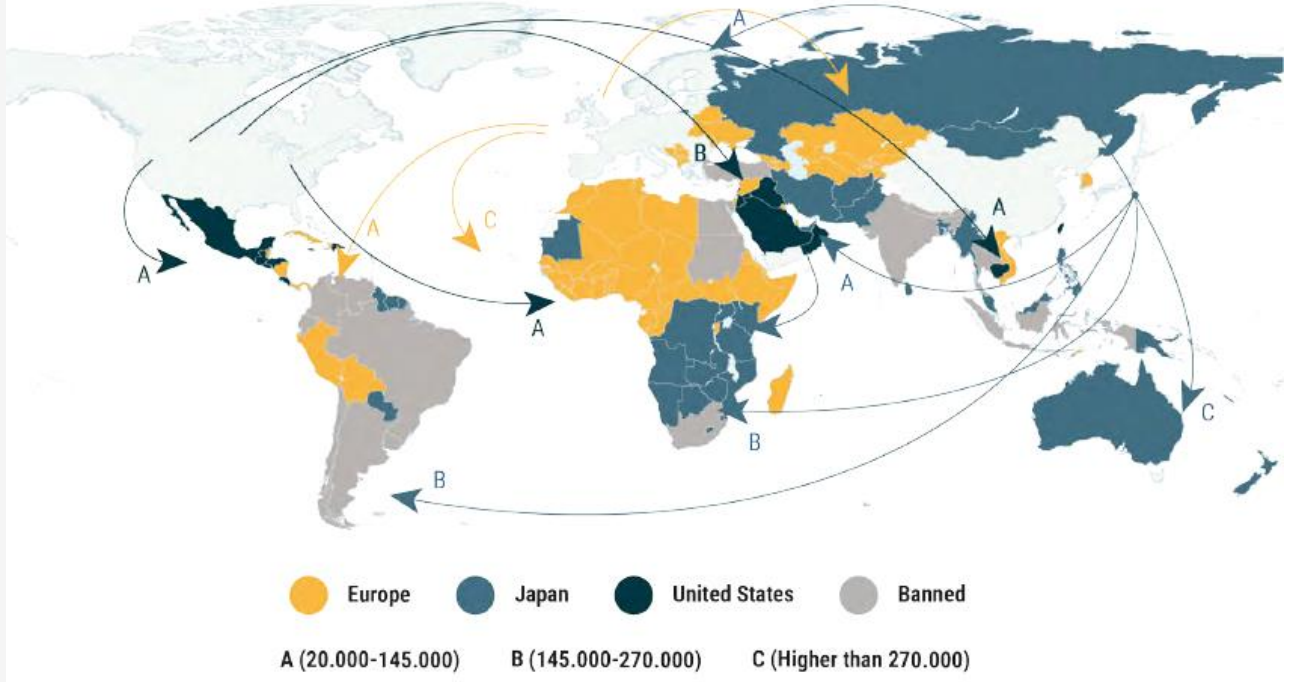
- The issue

  Used vehicles traded from high-income Countries to Africa
  - High age
  - High mileage
  - Not roadworthy
  - Highly polluting
  - Key components dismantled (Air-bags, Catalytic converters, tyres, …)

MAP 1

Used Light Duty Vehicles Quantity and Flow to Main Destination Markets from the EU, USA, and Japan (2017)



Source: UNEP, based on data collected from major exporters, 2017

Source ILT (Oct 2020)

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Safer And Cleaner Used Vehicles For Africa

Why does it matter?

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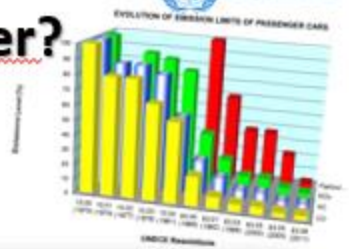

Why vehicle regulations (new vehicles) ?

Several versions of a given model are built, because:

- Left Hand Drive
- Right Hand Drive
- The US/Canada version
- The Rest of the World (e.g. for countries with low fuel quality)…

Same type
Same model
Same brut price

Different safety depending on national legal requirements (no airbags, lower quality material, less welding points, fewer structure components, etc…)

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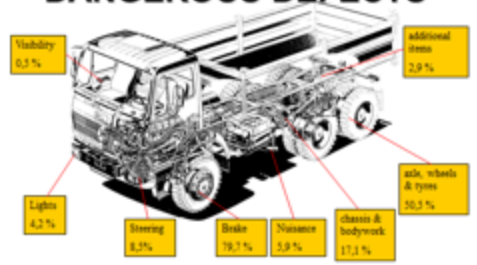
Why does it matter?

Why PTI ?

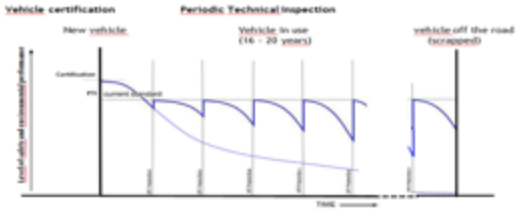
- Evidence base:
  - Technical defects related to fatal accidents (based on in-depth accident analysis)
    - 8 to 15% in high income countries (EU)
    - 15 to 25% in middle income countries
- 1997 Agreement
  - New specifications for new technologies
  - Towards continuous compliance

Example of results of technical roadside inspections (Austria ´08)

DANGEROUS DEFECTS



Vehicle Lifecycle



Elements to Be Agreed on

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What requirements are needed when a car is exported ?

- Safety : Vehicles that meet the minimum safety requirement according to UN Regulations
- Environment: Vehicles need to meet the required minimum Euro 4/IV emission standards for CO,HC, NOx and particulates
- Acceptable condition: Vehicles have passed a recent technical inspection (PTI)

Topic	Passenger cars	PTWs	Commercial vehicles
	UN Regulation	UN Regulation	UN Regulation
Active safety			
Brakes	R13 H (incl. ABS)	R 78 (incl. ABS) GTR 3	R 13 (incl. EVSC)
Electronic Stability Control	R 140 GTR 8		
Steering	R 79		R 79
Tyres	R 30/ GTR 16	R75	R 54
Mechanical couplings			R 55
Passive safety			
Helmets		R22	
Safety belts anchorages	R 14		R 14
Safety belts	R 16		R 16
Seats/ head restraints	R 17, R 25/ GTR 7		
Frontal collision	R 94		
Lateral collision/ pole side impact	R 95, R 135/ GTR 14		
Pedestrian safety	R 127/ GTR 9		
Child restraints	R 44		
Electric PTW safety		R 136	
Cabs strength			R 29
General safety			
Buses and coaches			R 107
Safety glazing	R 43/ GTR 6		R 43
Devices for indirect vision			R 46
Underrun protection			R 58 R 93
Lighting and light installation			
Installation of lighting	R 48	R 53, R 74	R 48

Importance of Vehicle Data Exchange

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- Why develop an International vehicle data exchange platform?
  - To provide information that only the right type of vehicles are exported that have:
    - Been built to meet minimum safety and environmental requirements
    - Been kept in an acceptable environmental and safe condition with the evidence of a Valid Roadworthiness certificate
    - Not been classified as End of Life (ELV) or salvage vehicle
  - To provide a tamper proof digital vehicle-data exchange system
  - To improve communication channels between importing and exporting countries

Expected Outputs of an Established Data Exchange Framework

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- Output 1 — An international Data-platform for the exchange of VIN based important vehicle documents
  - approval certificates (CoC)
  - most recent technical inspection (PTI) certificate
  - current status (registered, end of life, crashed, salvage,…)
  - documentation at moment of shipping
- Output 2 — A framework that can be used by relevant inspection authorities at the port of importing and exporting countries
- Output 3 — A digitized framework that gives private and public sector a platform that will be used view a ‘vehicle's history’.

Examples of Data Exchange Platforms

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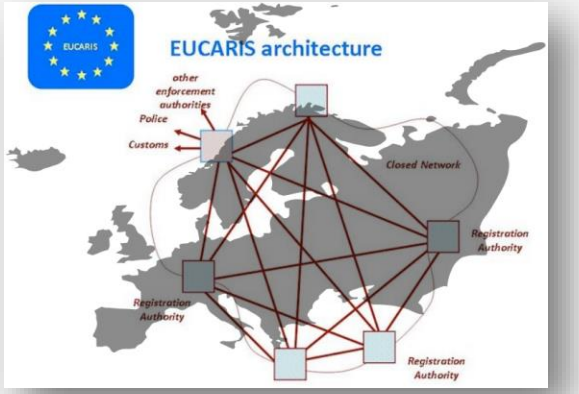
An international vehicle data exchange platform can be developed using already existing exchange data platforms like

- DETA : Database for Exchange of Vehicle Type Approval

- European Car and Driving License Information System



- RDW of The Netherlands

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Thank you!

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