



Conference on Improving Road Safety in the BSEC Region

ROAD USER BEHAVIOUR

19 November 2010

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This is the IRU

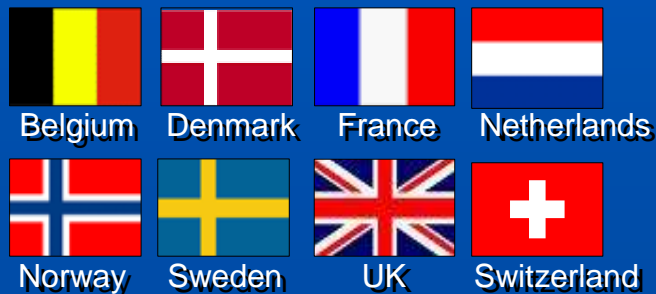




Evolution of IRU Membership

**Created
1948**

**National Associations
from 8 founding countries**



**2010
180 Members
74 Countries**

- Sustainable Development

- Innovation
- Incentives
- Infrastructure

- Facilitation

- Trade
- Tourism
- Road Transport



IRU's 3 “i”s for Sustainable Development



- 1. Innovation** – develop ever more effective “at-source” technical measures & operating practices to improve road safety.
- 2. Incentives** – encourage faster introduction by transport operators of best available technologies and practices.
- 3. Infrastructure** – ensure safe infrastructure through adequate investment in new infrastructure and remove bottlenecks and missing links and make full use of existing infrastructure.

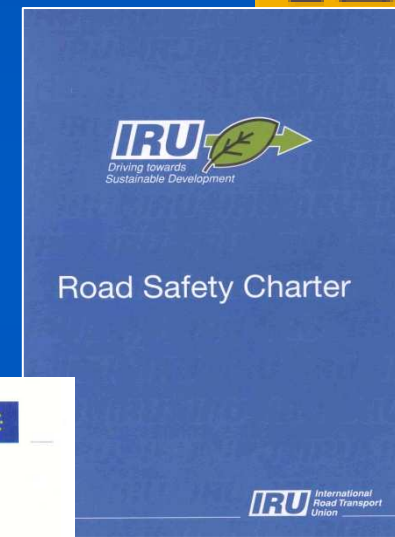


The Commitment Road Safety – Highest Priority

The IRU supports all
measures that
improve road safety

if

they effectively target
the main causes of
accidents involving
trucks.





ETAC – A Scientific Study

Funded by the European Commission and the IRU

- Expert teams *investigated on site* more than *600 accidents* involving trucks over 2 years.
- Investigations were based on a *scientific, widely accepted and internationally benchmarked methodology.*



ETAC – First of its kind!



ETAC Study - Methodology

- Experts cooperate with emergency services.
- Expert teams check selection criteria:
 - - the accident involves at least one truck (over 3.5t)
 - - the accident resulted in at least one injured person
 - - the vehicles are still in their final accident position
- Investigation and data collection on spot
- Data analysis and data verification





ETAC Study – Data Base

- describe the accident causation sequence
- reconstruct the pre-collision phases
- identify critical situations
- analyse malfunctions

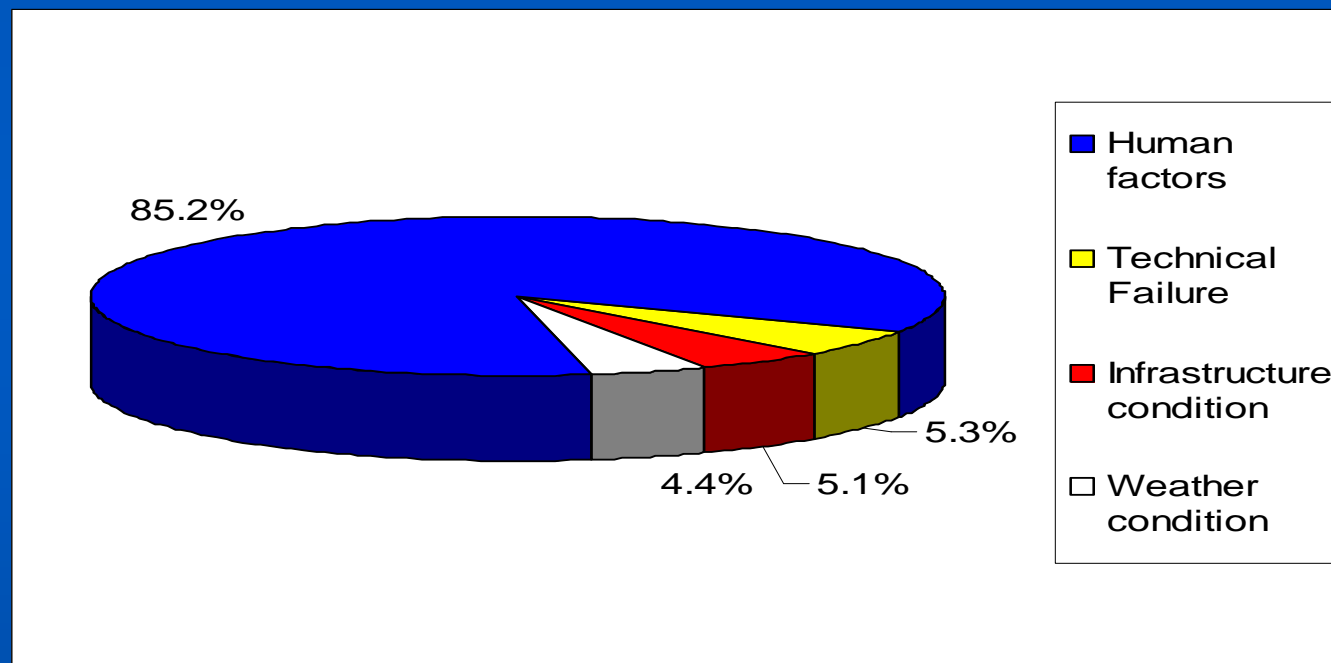
A screenshot of the ETAC TRUCK data entry software interface. The window is titled 'ETAC TRUCK Data' and 'TRUCK'. It features a navigation bar with tabs: IDENTIFICATION, DESIGN, VEHICLE PARAMETERS, AXLES, WHEEL PARAMETERS, PROTECTIONS, F.U.P., P.E.P., S.U.P., and C.A.E. The main content area is divided into sections. The 'SEVERITY OF THE ACCIDENT FOR THIS VEHICLE' section includes fields for 'Fatalities' (0), 'Injured Occupants' (0), and 'Uninjured Occupants' (0). The 'GENERAL TECHNICAL INFORMATION' section includes fields for 'Manufacturer' (Daimler), 'Model type' (D6296.20), 'Vehicle identification number' (V57A761404M), 'European vehicle identification number' (empty), 'Date of first registration' (2 / 2 999), 'Body type (straight truck)' (2 / 2 Flatbed with axle), 'Predominant color' (1 / 1 White), 'Driver's seat side' (1 / 1 Left), and 'Number of trailers or semi-trailers coupled to vehicle' (0). A 'Vehicle information: the truck' label is at the bottom.

**Identify the main causes
of accidents involving trucks**



Main Cause: The human factor

624 accidents showed the main cause of the accident is human error.



However, from the 85% linked to the human error, 75% were caused by other road users!



Main cause of an accident: Truck / Other road user

The top main causes for accidents between a truck and other road users are:

- 1- Non-adapted speed**
- 2- Failure to observe intersection rules,**
- 3- Improper manoeuvre when changing lanes.**



Load and fatigue: NOT a main cause

Loss of load,
Overload,
Unbalance of the load,
Insufficient load securing

Increased the
severity
of accidents

- Despite common belief, fatigue was the main cause in only 6% of the accidents.



Recommendations

Manufacturers & Infrastructure providers/developers

<i>Main Human Factors</i>	Manufacturers	Infrastructure providers/developers
1. Non-adapted speed	<ul style="list-style-type: none">- Adaptive cruise control- speed control systems related to the used infrastructure	<ul style="list-style-type: none">-Effective traffic signing- traffic warning regarding speed limits
2. Failure to observe intersection rules	<ul style="list-style-type: none">-Ultrasonic guard system for collision zones-vehicle to vehicle communication-blind spot mirrors	<ul style="list-style-type: none">-Improve visibility of traffic signs-effective traffic signing
3. Improper manoeuvre when changing lanes	<ul style="list-style-type: none">-Lane guard system-turning and lane change assistance-traction and stability control system-active roll stabilisation	<ul style="list-style-type: none">- Special focus on the road surface (road friction)



Recommendations

Governments & Media

<i>Main Human Factors</i>	Governments	Media
1. Non-adapted speed	<ul style="list-style-type: none">- Increase enforcement regarding non-adapted speed	<ul style="list-style-type: none">- Awareness campaigns on speeding and safety distance- Objective and fact-based report on accidents' causes
2. Failure to observe intersection rules	<ul style="list-style-type: none">- Revising driving school programmes to help understand truck manoeuvres- Awareness campaigns regarding intersection rules- Increase enforcement	<ul style="list-style-type: none">- Awareness campaigns to explain truck manoeuvres
3. Improper manoeuvre when changing lanes	<ul style="list-style-type: none">- Plan and maintain safe road infrastructure appropriate to current and foreseeable traffic demand	<p>Awareness campaigns on:</p> <ul style="list-style-type: none">- speeding- safety distance- driving manoeuvres of truck



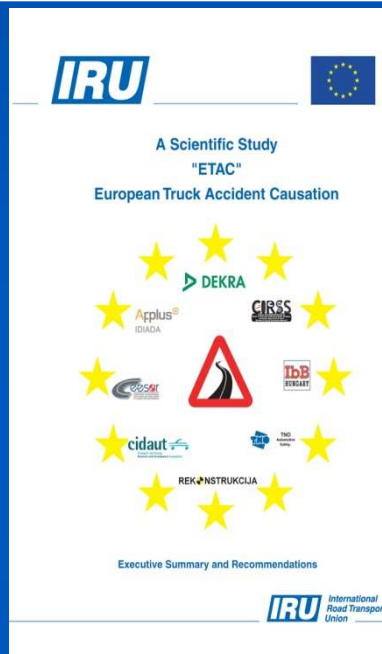
Recommendations

Truck Drivers & Other road users

<i>Main Human Factors</i>	Truck Drivers	Other Road Users
1. Non-adapted speed	- Adapt your speed to traffic and weather conditions	- Adapt your speed according to traffic and weather conditions
A LASTAC Study is now in the pipeline!		
Intersection Rules	visibility - anticipate problems - respect traffic regulations at all time	- respect traffic regulations at all time
3. Improper manoeuvre when changing lanes	- Increase driving experience by refresher training	- Increase driving experience by refresher training



IRU's other Road Safety Activities





The IRU has committed \$2 million to implement projects to effectively improve commercial road transport safety provided that this important commitment by the profession is matched by credible partners or by the international donor community





UN Decade of Action for Road Safety – IRU's calls on Governments

- Identify the main cause of accidents involving trucks by applying the ETAC methodology;
- Promote effective, harmonised and internationally recognised standards for vocational training of road transport professionals as provided by the IRU Academy;
- Work together with the business community to achieve national accident reduction targets





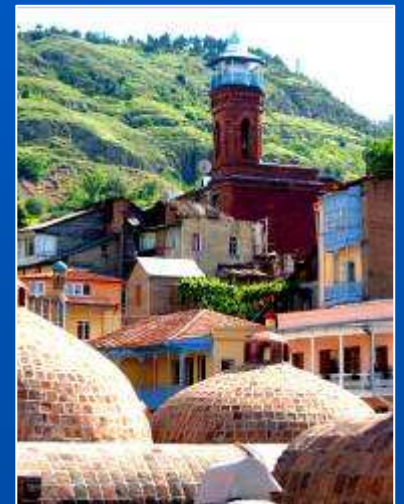
Road Freight Transport: Interconnecting every business and every transport mode between Europe and Asia – Focus on the Caucasus



6th Euro-Asian Road Freight Transport Conference & Ministerial Meeting



Tbilisi, 16-17 June 2011





www.iru.org

*Working together
for a better future*



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