



Improve Road Safety – Target the Main Cause Effectively

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Working together
for a better future



Travailler ensemble
pour un meilleur avenir



Evolution of IRU Membership

**Created
1948**

**8 Founder
States:**



Belgium



Denmark



France



Netherlands



Norway



Sweden



UK



Switzerland

**2009
180 Members
74 Countries**



Evolution of IRU Structure

1948

IRU founded in Geneva



1973

IRU Permanent Delegation to the EU established in Brussels

1998

IRU Permanent Delegation to the CIS established in Moscow



2005

IRU Permanent Delegation to the Middle East established in Istanbul

- Sustainable Development

- Innovation
- Incentives
- Infrastructure

- Facilitation

- Trade
- Tourism
- Road Transport

A large, white-outlined, jagged callout box pointing towards the list of priorities. It contains text stating that these priorities are also the priorities of the IRU Academy.

These are
also the
priorities
of the
IRU Academy



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

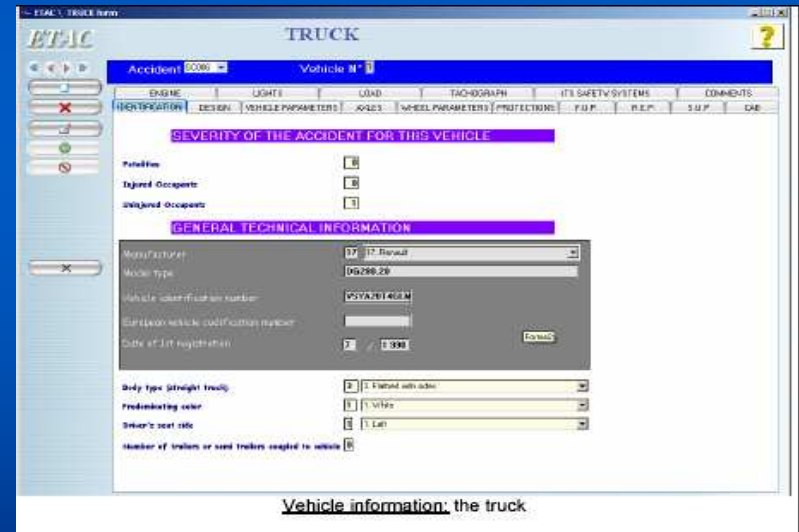
- Expert teams ***investigated on site*** more than ***600 accidents*** involving trucks over 2 years.
- Investigations were based on a ***scientific, widely accepted and internationally benchmarked methodology.***

ETAC – First of its kind!

- 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



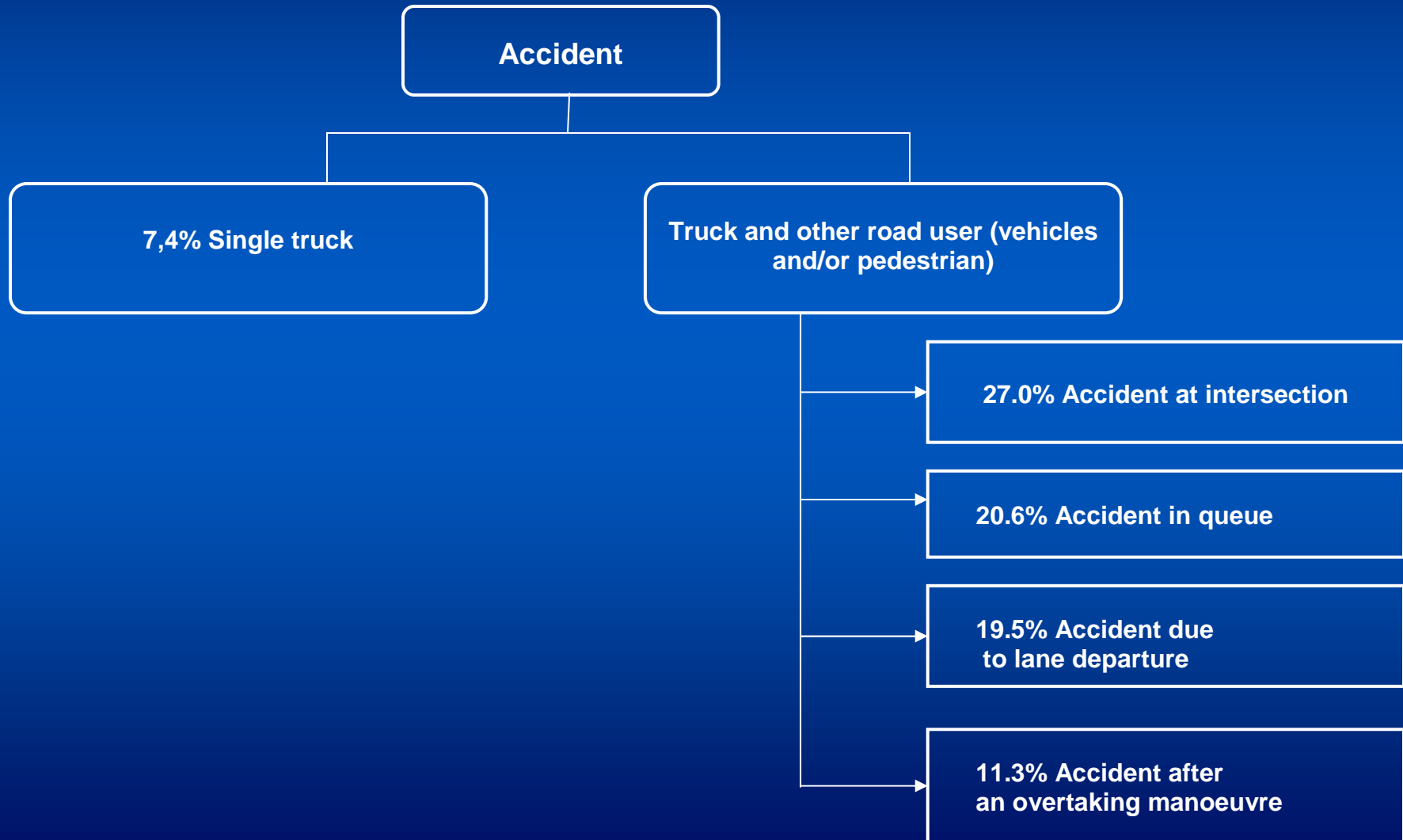
- Accident reconstruction
- describe the accident causation sequence
- identify critical situations
- analyse malfunctions
- categorise accident types



The screenshot displays the ETAC TRUCK software interface. The title bar reads "ETAC TRUCK". The main window has a menu bar with "Accident" and "Vehicle" options. Below the menu bar, there are tabs for "ENGINE", "LIGHTS", "LOAD", "TACHOGRAPH", "ITS SAFETY SYSTEMS", and "COMMENTS". The "Accident" tab is active, showing a "SEVERITY OF THE ACCIDENT FOR THIS VEHICLE" section with fields for "Fatalities" (0), "Injured Occupants" (0), and "Injured Non-occupants" (0). Below this is a "GENERAL TECHNICAL INFORMATION" section with fields for "Manufacturer" (Iveco), "Model type" (Iveco), "Vehicle identification number" (V57A76140M), "European vehicle identification number" (V57A76140M), "Date of first registration" (2000), "Body type (straight truck)" (Straight truck), "Production year" (2000), "Driver's seat side" (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**

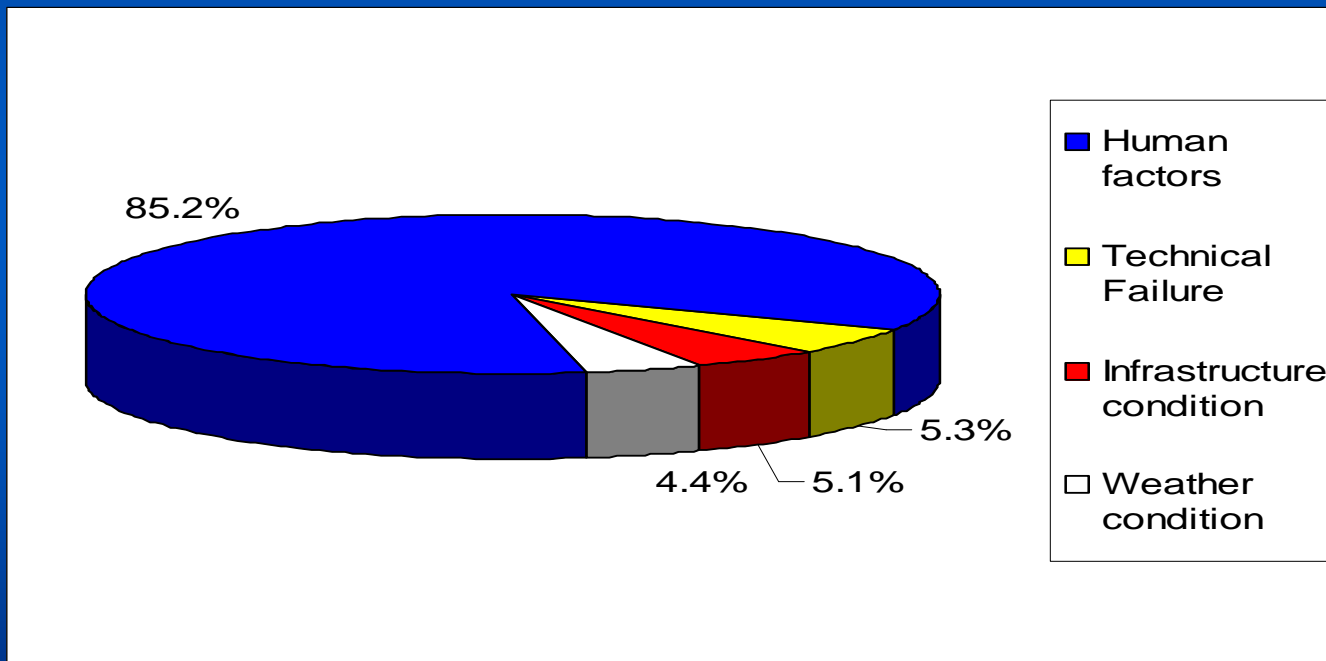
Accident Categories





Main Cause: The human factor

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



However, from the 85.2% 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, according to the mentioned accident configurations:

- 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**

ETAC Investigation

- **The load of the truck was the main cause of the accident in only 1.4%.**
- **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	<ul style="list-style-type: none">- Adapt your speed to traffic and weather conditions	<ul style="list-style-type: none">- Adapt your speed according to traffic and weather conditions
2. Failure to observe intersection rules	<ul style="list-style-type: none">- Plan the trip in advance- remember limitations of your visibility- anticipate problems- respect traffic regulations at all time	<ul style="list-style-type: none">- Increase driving experience by refresher training- respect traffic regulations at all time
3. Improper manoeuvre when changing lanes	<ul style="list-style-type: none">- Increase driving experience by refresher training	<ul style="list-style-type: none">- Increase driving experience by refresher training



The Minsk Recommendation

“ITAC”

Int. Truck Accident Causation Study

“CIS-TAC”

CIS Truck Accident Causation Study



5th Euro-Asia Conference: Almaty



5th Euro-Asian Road Transport Conference



Almaty, 11-12 June 2009



11-12 June 2009!



KazATO





*Working together
for a better future*



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