Executive Summary

For safer and more efficient road transport in the Arab region

Improving Road Safety and Transport Efficiency in the Arab Region
This research study aims to provide the public and private sectors with the comprehensive information that will help them establish the appropriate policies to address commercial road transport safety and ensure its efficiency.

IRU founded in Geneva, Switzerland, on 23 March 1948 is the global industry association for road transport, driving the sustainable mobility of people and goods across the planet.

www.iru.org

The Arab Union of Land Transport, located in Amman, Jordan, was established in 1976, as an offspring of the Arab Unified Economical Council. It is a Pan-Arab Organisation representing the road transport interests in Arab States League and has 60 members in 15 countries.

www.auolt.org
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Road transport is a key factor in helping economies thrive and reducing poverty. Unfortunately, despite its positive contribution to the development of the economies and societies, increased transport activities led to an increase of road traffic accidents. It is well-known that the human factor is the main cause of road traffic accidents. Numerous studies around the world have been conducted to analyse the causes of these accidents. However, fewer studies have specifically addressed accidents involving heavy vehicles, and only a handful have attempted to analyse how these might be mitigated through training of professional drivers, as well as by increasing their overall qualification levels.

In the Arab region, some data on accident causation is available at the national level, but no comprehensive research project has ever attempted to analyse the impact of professional training on commercial road freight transport operations.

The main focus points of the study are to identify the economic cost of lack of road safety, to highlight the impact of professional training, to identify best practices and weaknesses and to measure gains in efficiency and cost effectiveness.

IRU therefore commissioned Jadarah Group to carry out research to address this gap in knowledge. The study aims to provide the public and private sectors with the comprehensive information that will help them establish the appropriate policies to address commercial road transport safety and efficiency.

Accordingly, this study aimed to:

a. Highlight how professional training is possibly contributing to mitigate the number of accidents whilst also contributing to improved transport operation efficiency;

b. Determine whether the introduction of professional training for commercial transport drivers significantly affects the number of accidents experienced by transport companies;

c. Identify current best practices and areas of weakness which have direct impacts on overall commercial operational excellence;

d. Assess the value of training for professional truck drivers in terms of overall efficiency gains and cost effectiveness.

The study identified the benefits of professional training for commercial drivers as improved road safety due to accident mitigation, return on investment and overall efficiency gains for carriers.
2 Research Methodology

a. What we did and who we talked to

In addition to an extensive literature review, the researchers collected a mixture of quantitative and qualitative data via face-to-face meetings using two different types of survey instrument:

- A pre-designed questionnaire to assess drivers’ perceptions,
- and a semi-structured interview tool to collect data from transport managers.

All the respondents had experience of working for leading road transport operators in one of the six Arab countries participating in the study. These service providers had strong, established reputations in the sector through being pro-active in implementing stringent safety procedures including training of their drivers.

The qualitative methodology involved a snowball sampling technique for interviews carried out in each case study company selected. The researchers asked the main

Scope of Data Analysis

- 6 Arab Countries: Kingdom of Saudi Arabia, United Arab Emirates, Hashemite Kingdom of Jordan, Kingdom of Bahrain, State of Qatar and the Arab Republic of Egypt.
- 32 Companies
- Questionnaires returned by 146 drivers
- Interviews with 21 managers
- 9 companies using KPIs
contact persons in each company that had implemented a driver training scheme to recommend transport managers for an interview. For collecting quantitative data, the researchers targeted the commercial truck drivers who were receiving professional training on the premises of the case study companies selected. This was considered a viable means of collecting data as the necessary numbers of commercial truck drivers were present on company premises during researchers’ visits.

Combined data from the quantitative and qualitative methods were significant indicators of how transport managers and drivers perceived professional training.

b. The Interviews
The main perception deduced from transport managers was that

✓ Professional training is one of the most effective methods for reducing the number of accidents.

c. The Questionnaire
The main perception deduced from the questionnaire was that

✓ About 80% of all commercial drivers agreed that the poor driving behaviour was the major cause of road traffic accidents.

“About 80% of all commercial drivers agreed that the poor driving behaviour was the major cause of road traffic accidents.”
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A Snapshot of the World’s Commercial Road Accidents

International/regional studies:

• Global Status Report on Road Safety of WHO, 2013

• The Economic and Societal Impact Of Motor Vehicle Crashes, The US National Highway Traffic Safety Administration

• Preventing Road Accidents and Injuries for the Safety of Employees, PRAISE

• ETAC, European Truck Accidents Study

• LTCCS, Large Truck Crash Causation Study

• The True Cost of Road Crashes: Valuing life and the cost of a serious injury, iRAP

• Traffic Accidents in Jordan, Hashem R. Al-Masaeid, Jordan journal of civil engineering

• Cost of Road Traffic Accidents in Egypt, Mohamed A. Ismail and Samar M. M. Abdelmageed,

Highlights:

• Road accidents will be the 5th leading cause of deaths in 2020

• They currently cost the world an estimated 518 billion $ annually.

• “85–90%” of road accidents are caused by human error

• The Arab region has a higher proportion of road accidents and higher fatality and risk rates than other regions.

• The Arab region’s rate of road traffic deaths ranges between 12 and 41 per 100,000 whereas some countries today achieve rates of 3 per 100,000.

• The Arab region represents about 83% of the MENA region where road traffic accidents are the 4th leading cause of death.
**Key Findings**

- Reduction in accidents: 46%
- Reduction in man-days loss per year: 25%
- Decrease in revenues loss: 48%
- Decrease in repair costs: 17%
- Reduction in number of damaged deliveries: 51%

**KPI*s after training**

- Reduction in IVMS violations: 58%
- Reduction in fuel consumption: 14%
- Reduction in maintenance and repair: 20%
- Reduction in number of damaged deliveries: 42%

**Transport efficiency**

- For every $1 spent on training, around $17 were saved
- Calculated as 1632 % out of which 138% attributable to improved Road Safety

*9 companies were using Key Performance Indicators to monitor the impact of training*
Managers’ Perceptions of the Main Causes of Accidents

Top 10 causes of accidents
• Over speeding & loss of control
• Changing lanes dangerously
• Ignoring traffic rules
• Distractions and cell phone use
• Drowsy and reckless driving
• Unsafe loading
• Impatience and tailgating
• Tire blowouts
• Improper signposting of road maintenance
• Poor weather conditions
Interview Results: the Effects of Training and Monitoring on Improved Road Safety

- Professional training is one of the most effective methods for reducing the number of accidents; and

- Performance Monitoring Methods have an impact on improving road safety and ROI.

- The effects of both methods have been confirmed using statistical analysis—Pearson correlation coefficient.*

*Pearson correlation coefficient Calculation demonstrated that there was a close relationship between higher rates of professional training and performance monitoring and lower numbers of accidents.
Drivers’ Perceptions of the Main Causes of Accidents and Current Driving Test Applications

• Main cause of accident is poor driving; 80%
• Current applications are:
  • sufficient; 60%
  • Not sufficient; 40%
Drivers’ Perception of the Effects of Professional Training

- 87% reduces the risks of accidents
- 86% improves my performance
- 72.60% is an investment in me as a person
- 66.40% keeps me up to date with vehicle technology
Looking to the Future

In order to improve commercial road freight transport operations in the Arab region, the present study makes the following recommendations:

- Make road safety a key priority by adopting appropriate legislation and ensuring strict enforcement of the regulations.

- Introduce criteria for recruitment in the road transport profession, including minimum training qualification, with a particular focus on safe and efficient driving. The study's findings suggest that training on these issues is a necessity. It is also critical that such training (and related examinations) meets internationally recognised quality standards.

- Require a minimum level of education for commercial truck drivers, in order to make sure that they can properly complete paperwork and trip records, comply with traffic laws, and successfully undertake professional training programmes.

- Support and facilitate the establishment of institutions to train professional commercial drivers with the aim of establishing training programmes in which the goals of safe and efficient transport operations are prominent.

- Introduce road safety awareness programmes into the educational systems of schools and universities in order to promote a culture of road safety among all road users, including specific initiatives targeting the commercial transport industry.

- Make driving improvement courses mandatory for repeat violators of traffic laws and persons committing serious driving offences.

- Introduce professional qualification frameworks for commercial drivers, in a harmonised manner throughout the Arab region, for example, by adopting and recognising the international certificates issued by the IRU Academy.

- Commission in-depth country-specific studies to further analyse scenarios for the introduction of professional qualification frameworks and their impacts on road safety and transport efficiency.

- Establish high quality professional training programmes, backed by international industry standards, particularly in the field of road safety.

- Ensure that programme instructors have been trained to deliver the very best in-class training and are certified by an international body as qualified road transport training instructors.

- Improve companies' abilities to track key performance indicators in order to help them identify weaknesses, thus improving the efficiency of training and associated measures.

- Systematically ensure that transport companies’ workforces, particularly their professional drivers, undertake appropriate training and re-training and obtain certificates to attest to their professional competence.