Benchmarking for 
Road Safety

November 2021

Report – Benchmarking for Road Safety
Purpose of benchmarking

Project Activity

• Conduct an initial benchmarking exercise, using benchmark topics that were defined by a group Fleet Forum members – GOAL, Heineken, ICRC, OSCE, UNICEF and WHO – in 2020

• Analyse the data and compare organisation results with averages of the participating organisations

• Use the outcome as input to benchmarking workshops where practices are shared and learning takes place.

Output

• Organisation specific action plan, adjustment of the process as a start of annual benchmarking activity
Project update - Where are we today

✓ 11 agencies filled in the survey, 9 completed the survey fully, 2 completed the survey partially
✓ 2 agencies did not complete the survey but are interested to follow the outcomes
✓ Data was processed. Preliminary analysis reviewed by each agency
✓ Entity specific action plan was drafted and shared
✓ Workshops to learn from practices are planned
Overall statistics

- Collective fleet data of the 11 agencies was used for this analysis

10,864 assets, 69% being light vehicles

combined vehicle fleet of 11 agencies

99,244,196 kilometers driven in 2020

Age of vehicle: 5.9 years

Weighted average light vehicles
General data quality observations

• 5 focal points found it difficult to obtain the data, 4 of them having a global position
• One organisation reported that the lack of data was a reason for not completing the exercise
• One organisation reported that there was no insight in safety processes
• Based on crash averages from commercial fleet operators, it is likely that the data is underreported
This benchmarking exercise addresses 4 questions

- How many road traffic crashes, fatalities and injuries are associated with humanitarian organisations?

- What are the practices of organisations when it comes to driver training, risk assessment, fit to drive checks, tracking of behaviour and vehicle specification and selection?

- How do these practices effect the frequency of road traffic crashes and the severity of these crashes?

- Are there notable differences between organisations when it comes to practices that impact the frequency and severity of crashes?
Statistics from the commercial sector shows that 20% of the fleet is involved in a crash annually.

Numbers based on 10,864 vehicles (combined vehicle fleet of 10 agencies)

A total of 2173 crashes would be expected.

Source: Network of Employers for Traffic Safety, 20% of the vehicle fleet is involved in a crash annually
Based on the 20%, organisations should have reported....

Most organisations show underreporting of crashes

Organisations D and H are reporting to what is expected based on fleet size in the benchmark

Organisation D is reporting slightly more crashes

Source: Network of Employers for Traffic Safety, 20% of the vehicle fleet is involved in a crash annually
Sector averages: frequency and severity

- Based on statistics from commercial fleets\(^1\), the reported crashes should be 2.19 (based on actual reported mileage). Instead the participating organisations reported 1.08 crash per 100,000 kms.
- Organisations report less crashes with injuries (0.14) than what is expected (0.21)\(^2\)
- Organisations report a little bit less crashes with fatalities (0.002) than what is expected (0.007)\(^2\)
- The results give reason to believe that significant underreporting / incomplete reporting is going on.

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\(^1\): Source: Network of Employers for Traffic Safety, 20% of the vehicle fleet is involved in a crash annually
\(^2\): Source: Heinrich's Triangle, for every fatality, there are 29 injuries and 300 workplace accidents
Sector practice: Driver Training

- **Only 2 organisations** reported that 100% of the drivers received 8 hours of safe driving training in the last year.
- **3 out of 9 organisations** leave it to the countries to decide if training is needed, other organisations range the frequency from every year to every 3 to 4 years.
- **Sources** for road safety training content: crash reports, field trip debriefs, follow up on the type of incidents, driver feedback.
Sector practice: Driver Training

• 4 out of 9 organisations use individual driver needs as the base to develop training content
• All global / regional respondents state that supervisors of the drivers are not made aware of the training objectives
• Evaluation of the effectiveness of training takes place through many different sources: reduction of crashes and repair costs, evaluation during the appraisal of the driver, motivation of the drivers
Sector practice: The use of technology to measure road safety behaviour

Observations

- Although 91% of the respondents state that (part of) the fleet is tracked, only 50% uses the tracking technology to measure road safety behaviour such as speeding.
**Sector practice: fit to drive checks**

**Observations**

- **Perception** is the mostly named as a factor that is checked as part of the fit to drive check.

- Most organisations conduct fit to drive checks **at least every 2 years**.

- 3 respondents state that the medical check is **only done at recruitment** or when a driver was hospitalised.

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### Elements are included in the medical fit to drive check.

**Factors that affect:**

- Consciousness (e.g. seizures, syncope, hypoglycaemia and sleepiness)
- Perception (e.g. visual acuity and field of vision)
- Mental functioning (e.g. dementia)
- Behaviour (e.g. self and impulse control)
- Neuromuscular and musculoskeletal functioning (e.g. adequate manipulation of vehicle controls)

**# of respondents ticking Yes:**

- Consciousness: 6
- Perception: 8
- Mental functioning: 4
- Behaviour: 4
- Neuromuscular and musculoskeletal functioning: 4
Sector practice: Hazard identification and risk assessments

Observations
• Most organisations only use re-active methods to identify road safety hazards and risks

![Chart showing methods to identify road safety hazards and risks]

Reactive (lagging) methods
- Investigate crashes that have happened: 9
- Monitor crash trends: 8
- Conduct road safety risk assessments in order to establish whether the achieved or perceived risk is acceptable or tolerable: 4
- Systematic review of the safety management system: 4
- External road safety audits in place to test our road safety management system: 1

Proactive (leading) methods
Sector practice: Vehicle specification and selection (NCAP rating)

Observations:
• Organisations that report on local fleets report high compliance to 3star NCAP rating

Comment global participant: “Only vehicles ordered from 2019+ have both ABS and front airbags. 43% of all vehicles ordered since 2010 do not have front airbags”
## Comparing Practices - Methodology

1. We scored your answers

2. Based on the score, we colour coded your answers

3. Some of the answers were grouped per topic, e.g. Training

4. The max score per practice is 10

<table>
<thead>
<tr>
<th>Question</th>
<th>Score Breakdown</th>
<th>Colourcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the % of vehicles that meet 3star NCAP rating?</td>
<td></td>
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<tr>
<td>Answer option: 0</td>
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<td>1-50</td>
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<td>3</td>
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<td>51-80</td>
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<td>81 -100</td>
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<td>10</td>
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</tbody>
</table>

### Comparing Practices Methodology

<table>
<thead>
<tr>
<th>What is the percentage of drivers that have attended and passed a safe driving training of at least 8 hours practical and theoretical lessons in the last 2 years?</th>
<th>Answer option: red = 0</th>
<th>Answer option: amber = 3</th>
<th>Answer option: light green = 7</th>
<th>Answer option: green = 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Answer option:</em> 0</td>
<td>0</td>
<td>3</td>
<td>7</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>How often is the training offered to drivers?</th>
<th>Answer option: red = 0</th>
<th>Answer option: amber = 3</th>
<th>Answer option: light green = 7</th>
<th>Answer option: green = 13</th>
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<td>3</td>
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<table>
<thead>
<tr>
<th>Do you identify road safety needs to develop the content of the driver training?</th>
<th>Answer option: red = 0</th>
<th>Answer option: amber = 3</th>
<th>Answer option: light green = 7</th>
<th>Answer option: green = 14</th>
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<tbody>
<tr>
<td><em>Answer option:</em> 0</td>
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<td>3</td>
<td>7</td>
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</table>

<table>
<thead>
<tr>
<th>Do you identify individual driver needs to develop the content of the training?</th>
<th>Answer option: red = 0</th>
<th>Answer option: amber = 3</th>
<th>Answer option: light green = 7</th>
<th>Answer option: green = 16</th>
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<tbody>
<tr>
<td><em>Answer option:</em> 0</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are the supervisors of the drivers made aware of the training objectives before the training so that they can help prepare the drivers with the training and can help the drivers implement the learning?</th>
<th>Answer option: red = 0</th>
<th>Answer option: amber = 3</th>
<th>Answer option: light green = 7</th>
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<tr>
<td><em>Answer option:</em> 0</td>
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<table>
<thead>
<tr>
<th>How often do you evaluate the effectiveness of the training?</th>
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<th>Answer option: amber = 3</th>
<th>Answer option: light green = 7</th>
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<td><em>Answer option:</em> 0</td>
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<td>3</td>
<td>7</td>
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</table>
Comparing Practices – Interpreting the Colours

- Red = Room for Improvement
- Amber = The Basics
- Light Green = Good
- Green = Very Good

<table>
<thead>
<tr>
<th>Colourcode</th>
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<td>0</td>
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</table>
Comparing Practices - Methodology

Next, we calculated your scores per topic and compared it to the sector average.

Maximum score per topic: 10
### Comparing Practices – Results of all organisations

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<td>Vehicle specification and selection</td>
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</tbody>
</table>

Participating organisations have opportunities to improve in:

**Data collection and analysis**
- Check more regularly
- Include more elements than eye tests

**Fit to drive checks**
- Check more regularly
- Include more elements than eye tests

**Hazard and risk assessment**
- Include leading methods such as audits and systematic reviews of road safety management systems

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1: Organisation B did not provide information about any of the practices and is left out of the table.
Your score: How strong are the processes in the sector?

Observations
Strong points:
• Safety features in the vehicles (NCAP-rating)
• Availability of vehicle tracking

All other areas can be improved:
• Data access
• Hazard and Risk Assessment
• Average age vehicles
• Fitness checks
Workshop questions
Data:
1. What makes it easy or difficult to get the data and what does that mean for future interventions

Training
1. How is (road safety) driver training linked to road safety performance?

Technology
1. How will technology support measurement of road safety behaviour?

Fit to drive checks
1. What topics does a perception workshop include?
2. What are the results of the perception test on road safety performance?
3. What is the percentage of drivers where you need to do an intervention?

Hazard & Risk Identification
1. What do you learn from the lagging methods?
2. How do you use the leading methods to shape the road safety approach?

Vehicle Safety Features (NCAP)
1. How do you use NCAP, how is it part of your decision process when you procure vehicles?
Learning from each other - Data

What makes it easy or difficult to get the data and what does that mean for future interventions?

**What makes it easy or difficult to get the data?**

**Easy (Do’s!)**
1. Develop guidelines and policy
2. Identify reporting system
3. Raise awareness
4. Train drivers and other staff so they understand how to report
5. Give staff ownership over reporting and solution finding
6. Monitor the reporting frequency
7. Making it easy to report (use of technology)

**Difficult (Don’ts!)**
1. Fear of repercussion / blame
2. Manual methods to collect data
3. Lack of HQ guidance and support in decentralised organisations.

1. Blame culture hinders reporting
2. Reporting should be incentivised
3. Reporting: What is in it for the driver?
4. Incentivise reporting
5. Do spot checks on vehicles to ensure 100% reporting
6. Make reporting easy (use of technology such as tablets, apps, etc.)
7. Train, train, train
8. Set guidelines and system for data collection
Learning from each other - Training

How is (road safety) driver training linked to road safety performance?

1. Train is only one of the interventions
2. Use insight in causes of crashes to define training needs
3. Set the baseline before the training and measure results (for example crash trends)

1. Tailor training based on causes of crashes
2. Use non-subjective data to measure the impact of the training
3. Train human behaviour change
4. Train both drivers and other staff
Learning from each other – Hazard & Risk Identification

What do you learn from the lagging methods?
How are investigations used as learning practices?

1. Base interventions on trends, not anecdotal evidence
2. Be proactive, look out for events that could potentially lead to crashes
3. Analyse current practices to identify gaps

1. Learn from ICRC crash reporting and analysis
2. Advocate for independent analysis

What do we learn from lagging methods?

1. Share the outcomes of the investigations with the wider organisation
2. Identify preventative measures to avoid similar crashes in the future
3. Use the outcomes to raise awareness and as input for training
Learning from each other - Technology

How will technology support measurement of road safety performance?

1. Use tracking data in road safety discussions with drivers
2. Use tracking data to identify training needs

1. We use weekly tracking reports to sensitize drivers on their safety performance. We share this report with all drivers and then speak to specific drivers on the same
2. Install plug and play tracking devices in case of rental vehicles
Learning from each other – Fatigue Management

What management decisions are taken regarding driver working hours?

1. Analyse / gain insight in how many crashes driver fatigue was an underlying cause for the crash
2. Get insight in the number of drivers that have side jobs
3. Remove the perverse incentive that drivers like overtime and are therefore willing to make long hours

1. Use telematics to monitor driving hours and breaks
Learning from each other - Training

How do training refreshers impact road safety?

1. Define clear goals for the training
2. Measure behaviour before and after
3. Engage drivers in the expected outcome

1. Use webinars and toolbox talks to refresh drivers
2. Share best practices amongst drivers and other offices
3. Use the refresher training as a way to recognize the drivers
Learning from each other – (Road Safety) Audits

How do training refreshers impact road safety?

1. Collaboration with the audit team is key
2. Getting a road safety topic in the audit report helps to get attention for road safety. Management needs to take action
3. Discuss the topics that are important for road safety with the auditors

1. Audits are done on management standards: How does good look like?
2. Use data to make road safety issues visible
3. Check if the process for safe fleet management is in place

“Audits are a good tool to create management awareness. Once the auditors have identified issues, management needs to act”
Participant Benchmarking Workshop
What topics should be included in the 2022 Benchmark?

<table>
<thead>
<tr>
<th>Safety</th>
<th>Sustainability</th>
<th>Effectiveness / Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety features &amp; equipment in the vehicle</td>
<td>Greener fleet operations</td>
<td>Fleet rightsizing</td>
</tr>
<tr>
<td>Telematics and VTS in fleet operations</td>
<td>Vehicle waste disposal</td>
<td>Cost monitoring</td>
</tr>
<tr>
<td>Motorbike management</td>
<td>TCO of Electric Vehicles</td>
<td>Fuel and maintenance management</td>
</tr>
<tr>
<td>KPI: # of crashes per 100k km driven</td>
<td>% EVs and hybrids in the fleet</td>
<td>Car pooling / vehicle sharing</td>
</tr>
<tr>
<td>Best practice solutions</td>
<td>Disposal of old vehicles</td>
<td>Monitoring and reporting</td>
</tr>
<tr>
<td>Technology that help reduce RTC</td>
<td>Fleet Rightsizing</td>
<td>Budgeting and funding</td>
</tr>
<tr>
<td>Ways of measuring non-tangible training outcome: behaviours, attitudes, beliefs</td>
<td></td>
<td>CpK benchmark for different vehicle models</td>
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</tbody>
</table>