



Using simulators to Train and Assess Drivers – A focus on Category C simulators

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Key Figures



- ✓ National training association in transport and logistics
- ✓ Established in 1966
- √ 30 training centres nationwide
- √ 570 permanent staff
- √ 3,000,000 hours of training per year
- √ 43,000 people enrolled (trainees, apprentices, students)



Training areas

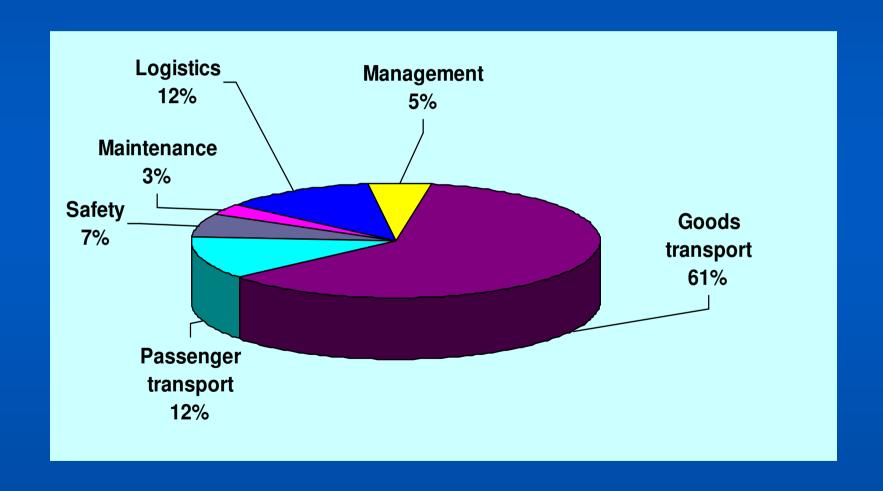


- ✓ Driving (Driving licence C, D, CPC driver)
- ✓ Transport management (CPC manager)
- ✓ Logistics
- ✓ Passenger transport
- ✓ Maintenance of trucks and utility vehicles
- √Safety



Breakdown of Training Activities









State of the French market

16 top-of-the range driving simulators nationwide



6 Fixed simulators

AFT: 1

AFPA: 2

(Ministry of employment)

Vocational schools: 3

(Ministry of Education)

AFT: 9

Promotrans: 1

















Why a simulator?

- Necessity to be in keeping with a rapidly-evolving road freight transport industry
- Necessity to comply with European safety requirements
- Necessity to adopt a more fuel-efficient driving
- Necessity to facilitate professional integration through exercises based on real-life
- driving situations
- Necessity to improve the image of the road freight sector
- Necessity to attract young people to the sector
- Necessity to take action with regard to the shortage of truck drivers in Europe





Presentation of THALES TRUST3000

- 1 Top-of-the range mobile simulator with Promotrans since January 2001
- In compliance with Directive 2003/59

Faithful reproduction of the HGV driver's environment by projecting images (town, country, mountains, traffic, weather) visible through the windscreen and in the external rear-view morrors

- Faithful reproduction of the dashboard, engine noises and realistic gear changes
- Dynamic parameters (acceleration and deceleration)







Instructor's assignment, preparation and profile

Instructor's assignment

- √ 1 instructor dedicated to the simulator and 2 other instructors for replacement
- ✓ Use of CREX software: tool for creating training exercises enabling instructors to achieve training objectives

Instructor's preparation

- √ 1-week training by THALES
- ✓ Hands-on practical training & self-training





Training objectives

Training objectives of the driving exercises

- → Fuel-efficient driving (eco-driving)
- → Anticipating danger
- → Improving road safety
- → Coping with emergency situations

Each exercise includes the following parameters

- →Objective of the exercise
- → Vehicle type and load
- → Weather conditions
- → Traffic scenarios
- >Evaluation criteria





Instructor's assignment, preparation and profile Instructor's profile

- ✓ Category C or EC, D or ED driving licence
- ✓ A vocational certification as HGV driver

OR

✓ A BEPECASER (qualification for teaching driving)

OR

- √ 5 years driving experience
- ✓ ICTs skills and competences (Intelligent Transport System)
- ✓ Self-sufficient, showing initiative



Training activities and use of the simulator



National legal framework

Recommendations set out in the *Arrêté ministériel* (enforcement order from the Ministry) of January 3, 2008

✓ CPC drivers

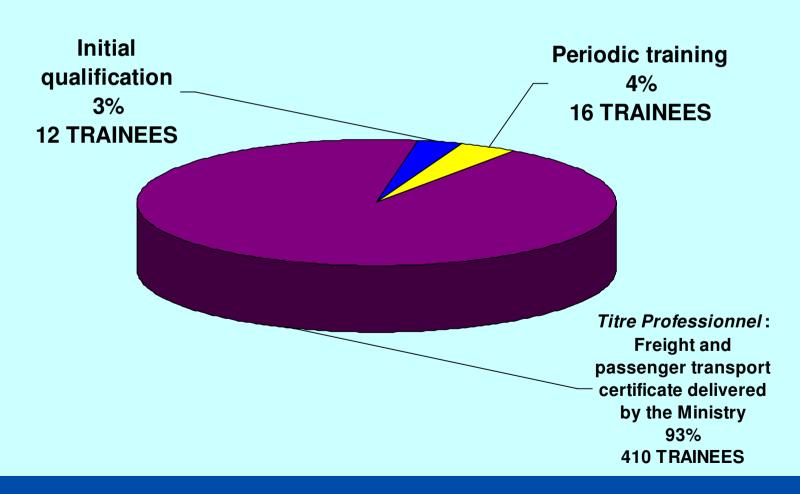
- Initial qualification: 10 hours of practical training including 4 hours on simulator
- Periodic training: 2 hours of practical training including ½ hour on simulator



Training activities and use of the simulator



438 trainees trained on simulator in 2009

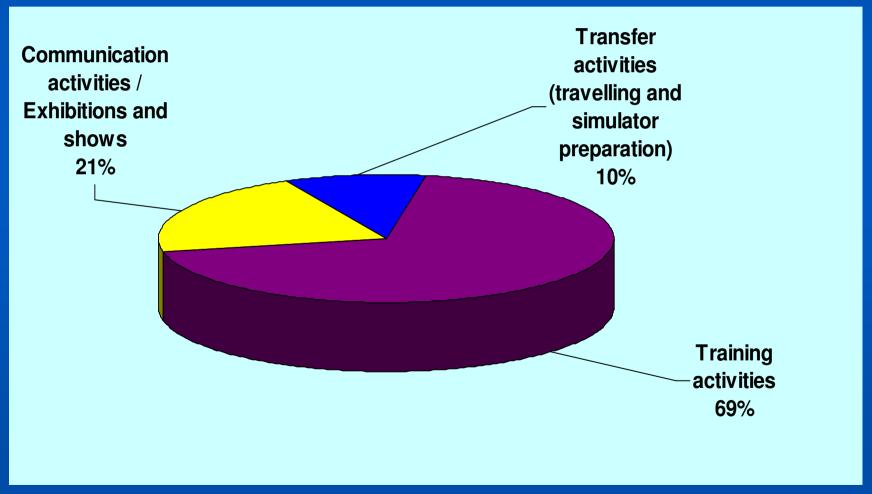




Training activities and use of the simulator



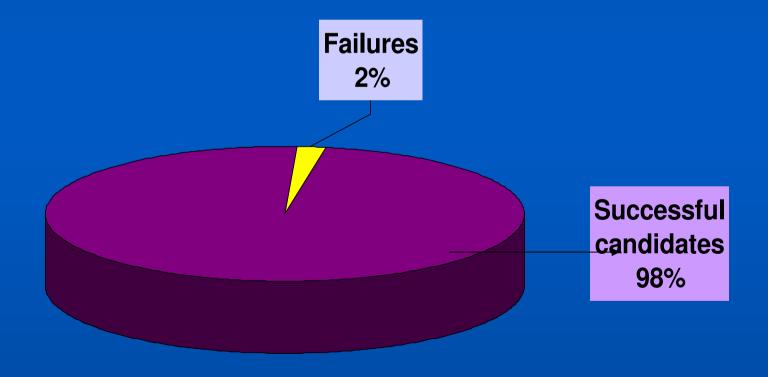
Use of the simulator







Use of the simulator: Learning outcomes







Constraints

- ✓ Total cost = 1 million euros (simulator, trailer and tractor)
- √ 3-year maintenance contract with THALES = €60,000
- ✓ Simulator insurance cost per year = €12,278.36
- ✓ Tractor and trailer insurance and maintenance plus fuel costs = €755 per week
- ✓ A 15-minute driving exercise requires 3 hours of preparation work
- Both installation and disinstallation of simulator in training centres require a whole day





Conclusion

The simulator is indispensable:

- ✓ To meet the needs of a rapidly-moving road transport sector
- √ To encourage fuel-efficient driving
- ✓ To improve drivers' learning pathway and professional integration
- √ To analyse trainees' learning outcomes
- √ To assess individual driving performance



Under the Train-the-Trainer Programme for CPC Driver Periodic Training Instructors we recommend a 5-day training on the use of the simulator





THANK YOU!

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