



# TGX EcoLion.

Extremely economical. Superbly safe.



# Leave cost pressures behind.

## Target new profit objectives with the TGX EcoLion.

Experience a truck that opens up whole new dimensions in economy and safety. The TGX EcoLion combines top-of-the-range series equipment full of innovative highlights with three exclusive equipment packages and attractive services aimed at maximum efficiency.

The 4x2 semitrailer tractor with leaf/air suspension comes perfected for long-haul transport: XXL or XLX cab, MAN TipMatic® Fleet, ESP, differential lock and innovative MAN DirectSteering are all standard features for more economy, more safety. And for even more efficiency? Opt for the equipment packages that we've wrapped up extra for the TGX EcoLion. A Value Package increases resale value, a Safety Package enhances transport safety, a Trucker Package produces higher driver motivation and performance. Everything is rounded off by MAN TeleMatics and MAN ProfiDrive training, for true excellence in transport.



Optimal vehicle configuration for extremely attractive total cost of ownership



Simple procurement and speedy availability



Expanded series equipment with focus on fuel saving



Value Package for higher resale value



Safety Package with innovative assistant systems for improved transport safety



Trucker Package for greater driver motivation and performance



MAN ProfiDrive training for more economy and safety



MAN TeleMatics to optimise fleet management



Most economical MAN semitrailer tractor for long-haul transport

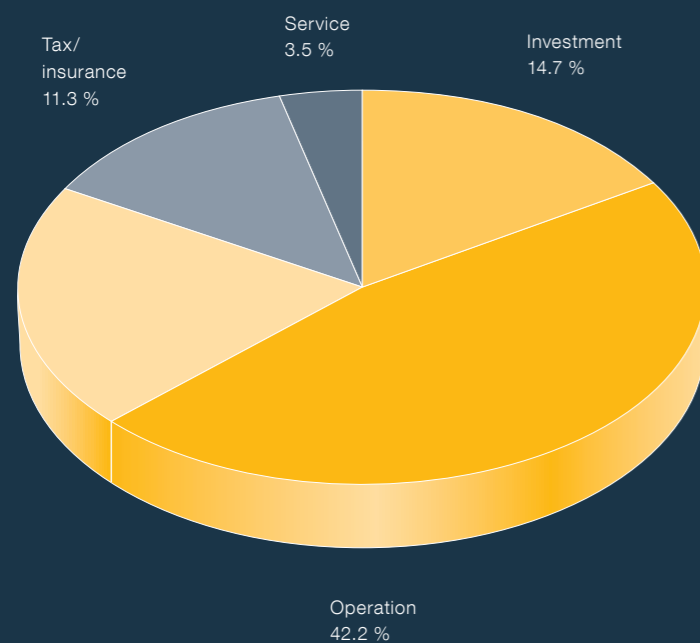


## On the bottom line.



“In the face of tough competition in the haulage business your only choice is to reduce vehicle TCO and optimise your operations for economy where you can. The TGX EcoLion certainly shows the way to succeeding.”

Martin Bäuml, managing director of haulier Bäuml GmbH, calculates his trucks down to cents per kilometre. That way he's able to optimise his transport services for different routes, vehicles and drivers.



### Total Cost of Ownership (TCO)

Investment	75,000 €	14.7 %
Operation	214,775 €	42.2 %
Driver	144,000 €	28.3 %
Tax/- insurance	57,600 €	11.3 %
Service	18,000 €	3.5 %
<b>Total</b>	<b>509,375 €</b>	<b>100.0 %</b>

### Assumptions

Investment	= procurement - residual value
Length of use	4 years
Annual kilometrage	125,000 km
Average consumption*:	31.1 litres/100 km
Average fuel price	1.25 €/litre
Lubricant consumption	10 litres/125,000 km
Tyres	average service life 125,000 km for purchasing price of 5,000 € per set and truck
Insurance	2,000 € p.a.
Tolls	80,000 km on German motorway at 0.13 €/km
Tax	2,000 € p.a.

Tough competition in the transport and logistics sector makes the best driver the most economical driver. So if you want to get more out of your trucks, motivate your drivers to excellent performance and achieve a sustained reduction in total cost of ownership, the answer is there in the TGX EcoLion.

### Cutting your costs.

The TCO of a transport service breaks down into initial investment, costs of operation and the driver, tax and insurance and servicing expenses. Assuming annual kilometrage of 125,000 km and four years of ownership, the operating costs (fuel, lubrication and tyres) are a clear first at 42.2 %.

### Saving means making the right investment.

Specifically an investment in measures that substantially reduce a vehicle's fuel consumption. An effective part is played by the standard MAN TipMatic® gearbox, the automatically disengaged air compressor and optional Aeropackage. But the driver too, by learning to drive with the right foresight, can make a major contribution to reducing diesel consumption. After all, personnel costs at 28.3 % for the driver are the second biggest block in your TCO result. So an investment in MAN ProfiDrive to train your drivers is certain to pay back. Your decision to drive the MAN TGX EcoLion puts you on track for greater economies in your fleet.

\* Source: figures from Trucker 2/2008 for TGX 18.440 with changing loads and topography of varying difficulty.



Investment 14.7 %

## The right return on your investment.

### The challenge is to increase residual value.

The cost of investing in a vehicle breaks down to its purchase price minus its residual value when you decide to part with it. In the case at hand the investment accounts for 14.1 % of TCO. That means you can very much influence the resale value of a vehicle by choosing the right configuration, and considerably reduce your investment or leasing rate. That's the right way to start economising even before a vehicle first hits the road.

### Resale value at added value.

Make sure of high resale value when you purchase your vehicle. The TGX EcoLion comes ready equipped for maximised resale value. The automated MAN TipMatic® gearbox, in particular, has a more than proportional share in maintained worth at resale. You can top that with the optional Value Package: extra to the expanded standard equipment of the TGX EcoLion, it enhances resale value and reduces the leasing rate.

#### Value Package

- Intarder
- Separ fuel filter, heated with water separator
- Air dehumidifier, heated
- Working kit for trailer lift axle
- Alternator 110 A, enhanced efficiency



Operation 42.2 %

## How to get further with less.

Fuel, lubricants and tyres add up to the operating costs, which in the case at hand are 42.2 % of TCO. Fuel accounts for 90.5 % of this, tyres make up 9.3 %, and lubricants 0.2 %. Which shows quite clearly that the main cost driver is diesel. So to be on the winning side, it's obvious you should invest in ways of reducing fuel consumption.

### Four ways to reduce fuel costs.

The more the cost of fuel increases, the more urgent the need to cut fuel consumption. It's not only the financial aspect – we also have to reduce the burden on our environment. MAN and the TGX EcoLion map a reliable route to lower fuel costs.

#### 1. Optimal vehicle configuration

- Fuel-saving drive train with efficient engines and the automated MAN TipMatic® gearbox
- Technologies to reduce consumption such as APM (Air Pressure Management), TPM (Tyre Pressure Monitoring) and Aeropackage

#### 2. MAN TeleMatics

- Extensive vehicle analysis shows potential for cutting consumption and enhancing cost-effectiveness
- More profitability through greater transparency in the transport process
- Fewer unladen trips, fewer standstills
- Less workload on despatching

#### 3. MAN ProfiDrive

- Driver training to promote economical and safe driving habits
- Fuel management audit through to plan of corrective measures for an improved fuel balance

#### 4. Fuel-saving maintenance

- Regular maintenance means fewer standstills and minimises consumption



	Euro 4 EGR	Euro 5 EGR	Euro 5 SCR
TGX EcoLion 18.400	■	■	■
TGX EcoLion 18.440	■	■	■
TGX EcoLion 18.480	■	-	■
TGX EcoLion 18.540	-	-	■



#### APM – Air Pressure Management.

An innovation that helps to save fuel and reduce CO<sub>2</sub> emissions: APM with an automatically disengaged air compressor, which MAN is the first manufacturer worldwide to offer, comes to standard\* in the TGX EcoLion. Disengaging the air compressor produces the following advantages:

#### Turn-on time reduced by up to 90 %

- Compared to a standard air compressor
  - Longer service life
  - Less noise

#### Fuel saving of up to 0.5 litre/100 km

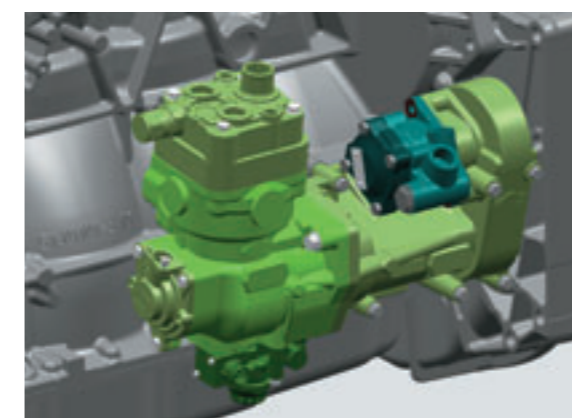
- For 125,000 km that means an annual saving of 781 € (assumed fuel price: 1.25 €/litre)

#### CO<sub>2</sub> saving of up to 13 g/km

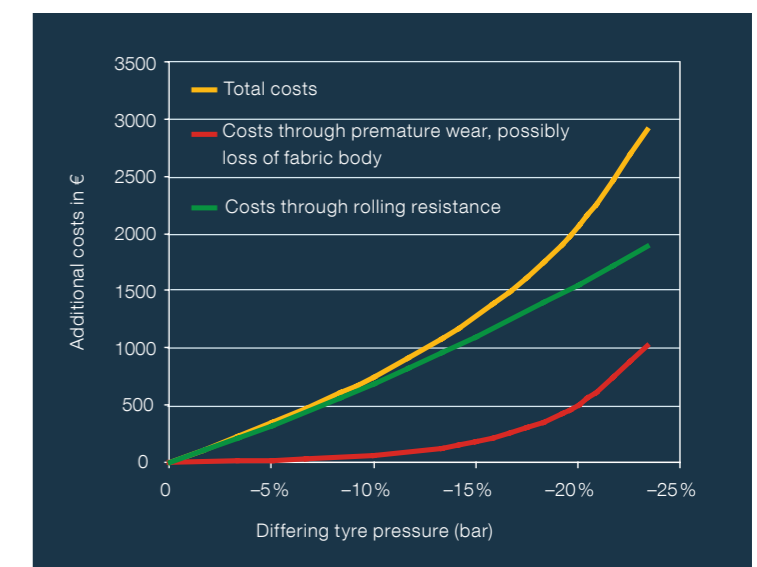
- For 125,000 km per year that amounts to 1.625 t

#### TPM – Tyre Pressure Monitoring.

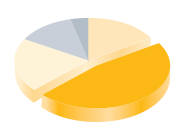
As many as 90 % of tyre blowouts leading to costly or even dangerous standstills of a vehicle can be avoided. The optional TPM enhances safety as well as producing economies. The driver can call up and check tyre pressure on the onboard display. If the pressure is 20 % less than it should be, the display issues a warning. In this way the driver can always ensure optimal tyre pressure and minimise rolling resistance – which in turn reduces fuel consumption and increases kilometrage per tyre.



\* APM with automatically disengaged air compressor. This feature is not available until the TGX EcoLion goes into series.



Semitrailer unit, 31 t, 125,000 km/year, 1.25 €/litre diesel.



Operation 42.2 %

#### The engines: a clean lead.

The TGX EcoLion is the right investment in the environment too. For both Euro 4 and Euro 5 MAN offers sophisticated solutions with many advantages. Powerful MAN common-rail engines give you a choice between exhaust technologies with and without AdBlue®.

An innovative system composed of common-rail injection, cooled exhaust gas recirculation and MAN PM-KAT® filter requires no AdBlue®. That avoids additional costs for maintenance and the additive. You save on tolls, waste no time on extra refuelling stops, and gain in payload too. This MAN technology works without increasing fuel consumption, and requires no additional space for integration on the chassis.

All engines can also be had with the perfected MAN AdBlue® solution.

#### MAN TipMatic® Fleet.

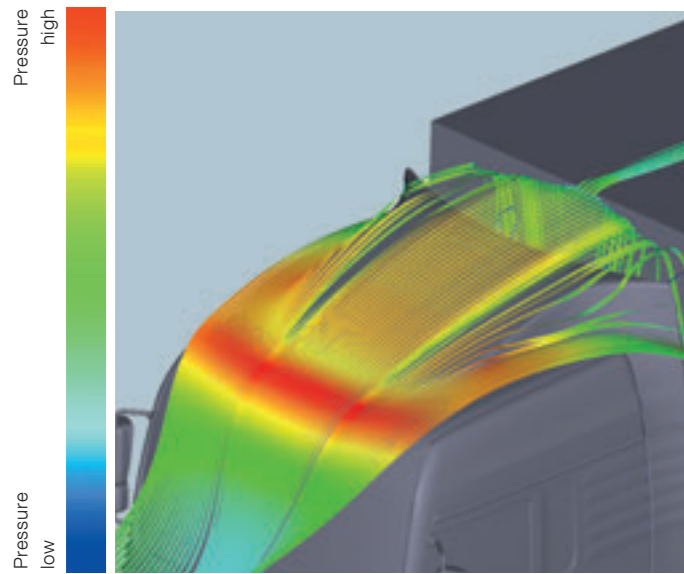
– automatically shifted is better.

Now there's no more shifting into the wrong gear. The driver is not distracted from what's happening on the road. That improves transport safety. The standard MAN TipMatic® Fleet features special transmission software with gear changing strategy optimised for fleet use. The automated 12-speed gearbox is easy on the drive train, and helps to noticeably reduce fuel consumption. Gear changing errors can be forgotten.

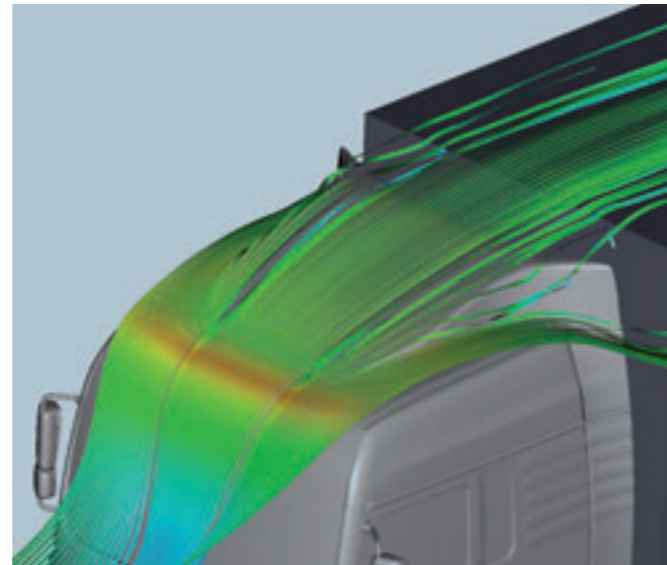
#### MAN TipMatic® Profi.

– look ahead and shift.

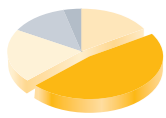
Changing at the right time is important in driving really economically. The simplest and most convenient way is with the optional MAN TipMatic® Profi, which can be operated both fully automatically and manually by a toggle lever on the steering column. For high dynamic performance there's also a kick-down function.



TGX EcoLion with a roof spoiler not adjusted optimally.



Correct adjustment of the roof spoiler.



Operation 42.2 %

**MAN Aeropackage – less wind means more.**

Aerodynamically the TGX EcoLion is in impressive shape. Its air resistance is improved by as much as 6 %, which further reduces fuel consumption. With the Aeropackage you can even better that. Roof spoiler and sideflaps, optimised in the wind tunnel, produce an additional reduction in air resistance, cutting diesel consumption by as much as 5 %. That's a sizeable saving on annual kilometrage of 125,000 or more. Your investment in the MAN Aeropackage can pay for itself in just a few months.

**Spoiler matching included – a question of adjustment.**

When you opt for the MAN Aeropackage, a very special service goes with it: proper adjustment. You simply call by at your MAN Truck Center in your TGX EcoLion, and the Aeropackage is perfectly matched to the semitrailer. It only takes a few minutes and is quite free of charge. Another typical service from MAN.

**MAN DirectSteering:**

**– steering with immediacy.**

The steering is a driver's sixth sense. Through it he's in constant contact with the road feeling the condition of the road and how the vehicle responds to it. A steering that's effortless and comfortable on the one hand and allows maximum feedback from the road on the other is important for confident driving.

MAN is opening a new dimension in directness and precision: DirectSteering, the innovative power steering designed exclusively for the TGX EcoLion, means a big advance in driving assurance and vehicle dynamics. With a 1:15.2 ratio it offers sporty and at the same time direct handling as never before. The result is precise and smooth steering of a truck at all times.



“The improved steering is sensitive, effortless and very comfortable – you really notice it in the ease of keeping in lane on long stretches.”

Harald Lang, professional trucker, now drives more economically by avoiding corrections on the steering, enabling him to reduce the rolling resistance and thus fuel consumption.



Driver 28.3 %

## It's the driver who brings it home.

The expenditure on the driver is made up of wages and non-wage labour costs plus expenses for any continuing and advanced training. In the case at hand driver costs amount to 28.3 % of TCO. It's well worthwhile paying due attention to the second biggest factor in the cost structure and investing in the quality and skills of your drivers.

Truckers must feel well all over if they're going to produce the staying-power and concentration it takes to confidently handle the different kinds of transport chore they may be confronted with. The right cab is an essential contribution. Plus you can boost the motivation and performance of your drivers by the Trucker Package and MAN ProfiDrive training.

### Trucker Package

Attuned to the needs of the driver, the Trucker Package combines a number of features for more comfort, convenience and ergonomics on board. Depending on the country, the Trucker Package can include useful items like a refrigerator box, a 12/24 V power outlet, a second drawer in the middle of the dashboard, electric sun visor or electric pop-up sunroof. Just ask your local MAN partner what the package will contain for you.

### A good cab is a paying proposition.

Comfort and convenience are not luxuries. Drivers who climb into an optimal workplace perform better and drive more safely. In the TGX EcoLion you get your money's worth, and more. Take the XLX cab for example. Created for modern long-haul transport, it combines space, safety and comfort into a unique overall concept. There's really only one alternative to this cab: the optional XXL with more than generous volume of 10.46 m<sup>3</sup>.

### XLX cab

#### – full standing height, all-round comfort.

Optimally tailored to the fleet segment. A generous interior with practical stowage compartments. With one comfortable bunk to standard, or on request with a second bunk or multifunctional stowage.

### XXL cab. Unique Size.

More space than any other cab in Europe. For maximum comfort and optimal freedom of movement in international long-haul transport. Two bunks, versatile shelving and stowage, 2,100 mm standing height.

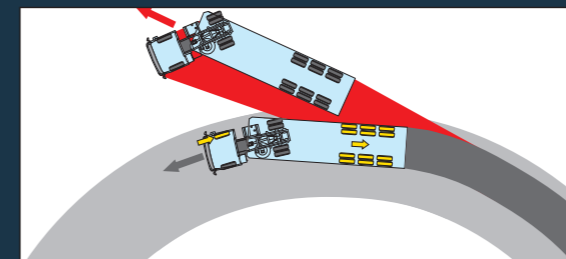
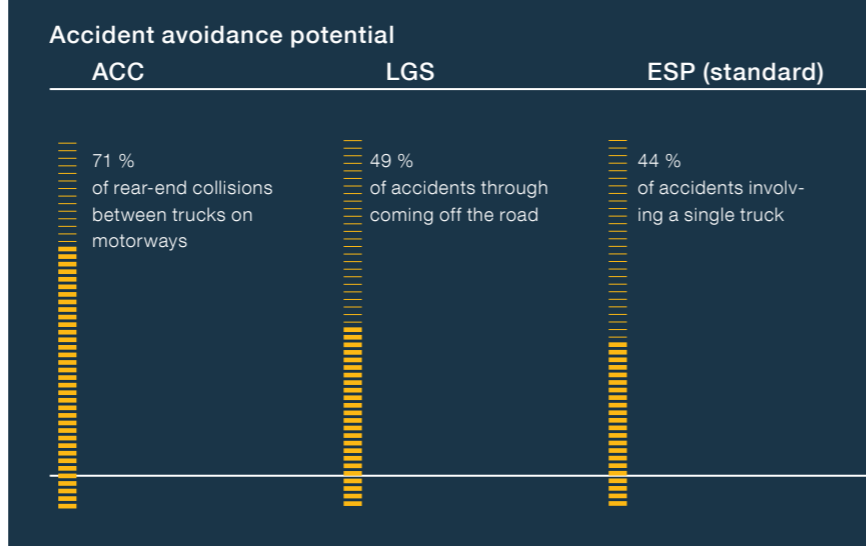
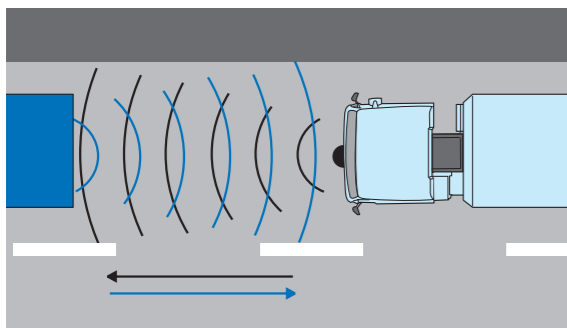


# Good to know your guardian angel has bits and bytes.

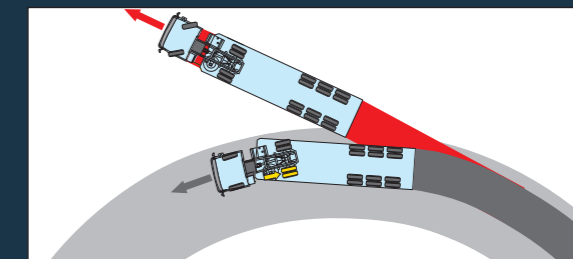


**Safety Package**

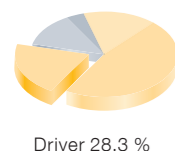
- ACC – adaptive cruise control
- LGS – lane guard system



Compensatory braking if a tractor is oversteered.



Compensatory braking if a tractor is understeered.



Driver 28.3 %

## Adaptive cruise control (ACC) – spaced for safety.

Automatic ranging determines the distance and difference in speed from the vehicle ahead and ensures a safe distance by electronic intervention in the accelerator or brake pedal. ACC can be used from a driving speed of 25 km/h. It eases the burden on the driver and helps him to relax by integrating the vehicle harmoniously in the traffic flow. Analyses by experts say that ACC can prevent some 70 % of rear-end collisions between trucks on motorways.

## Lane guard system (LGS) – always on track.

The electronic lane guard system permanently detects the lane ahead of the vehicle. If the driver strays from the lane without activating a direction indicator, he is warned by an acoustic signal. It makes the sound of rattling nails in the loudspeaker on the side concerned and is intuitively correctly understood by the driver. LGS increases a driver's awareness so that he stays in lane, preventing many a dangerous situation. As many as 50 % of accidents through coming off the road could be avoided with LGS.

## Electronic stability program (ESP) – so you don't start skidding about.

A single curve can throw you. Unpleasant surprises can also be lurking when you suddenly swerve to avoid an obstacle, or if there are changes in the road surface. To make sure your TGX EcoLion keeps on track, it features as standard the electronic stability program for more safety in road traffic. ESP intervenes as quick as a wink before a critical situation arises. It stabilises the train and keeps it safely on track. That's an enormous safety gain for all road-users. In plain text: up to 44 % of accidents involving a single truck could be avoided with ESP. Good to know that the TGX-EL has the electronic stability program onboard.

## Continuous damping control (CDC) – more comfort for sure.

Active roll stabilisation is optional on the TGX EcoLion. It matches the vehicle perfectly to the driving situation, load and road. Damper control is automatic and continuous. During cornering, quickly changing lane or during sharp brake manoeuvres the harder damper adjustment prevents rolling or pitching movements, creating greater driving safety.



# Drive economically, get there safely.



Driver 28.3 %

## MAN ProfiDrive makes good drivers even better.

Driving economically isn't exactly something we're born with. But MAN ProfiDrive can show you how enjoyable it can be. Let's assume you find out through a vehicle operations analysis by MAN TeleMatics that your drivers' style could be optimised. So you draw the right conclusions and come to MAN ProfiDrive. This is where drivers can learn surely and safely how to drive more economically. After detailed instruction in all functions and controls of the TGX EcoLion, drivers undergo special practical training supported by solid trucking theory. Economy training naturally focuses on saving fuel and going easy on everything that makes up a truck. In safety training the emphasis is on reacting correctly in critical situations and driving a truck with confidence.

## Economy training – saving fuel and enjoying it.

Expenditure on fuel together with maintenance and wear and tear accounts for almost a third of vehicle TCO in long-haul traffic. In ProfiDrive economy training drivers learn clever tricks by which they can save up to three litres of diesel over 100 km. That's almost 10 % less fuel – money that stays in your pocket.

## Safety training

### – don't always rely on your guardian angel.

Hitting the brakes hard and hoping that it's enough – just about every trucker knows this situation. In safety training on MAN vehicles or the customer's own, truckers learn to control their vehicles in critical situations and to avoid accidents.

## Introduction.

You can only drive a vehicle economically and safely if you know it inside out. Detailed instruction lasting half a day in the functions and controls of MAN trucks create a foundation for safe and economical handling of the vehicles.



### Contents of economy training

- Reducing fuel consumption
- Lengthening the life of chassis and engine components
- Minimising operating costs
- Driving the ecological way
- Driving for low wear and tear

### Contents of safety training

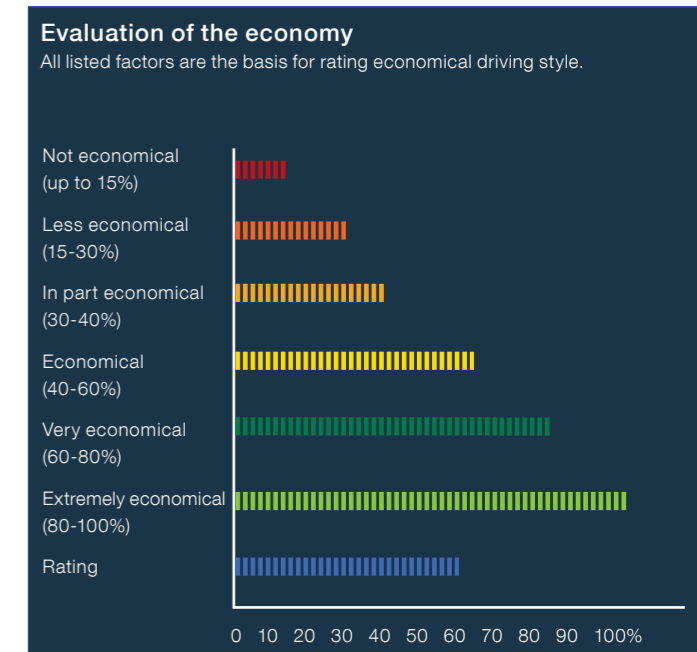
- Recognising dangerous situations, avoiding and mastering them
- Learning to recognise and control borderline cases
- Sensitisation for critical situations
- The physical laws of driving
- Finding the optimal stopping distance and time in very different situations
- Strengthening the driver's sense of responsibility

### Contents of introduction

- Getting acquainted with vehicle technology
- Sure operation of all vehicle components
- Achieving optimal transport performance and cost-effectiveness



Service	Data	Dispo
Technical vehicle use analysis with report	■	■
Maintenance data	■	■
Driving and standstill display	■	■
Tracking and tracing	■	■
Geofencing (polygon and circle)	■	■
Release for sighting by third parties	■	■
Address management	■	■
Route planner with toll precalculation (D)	■	■
Logbook	■	■
Driver management		■
Messaging (bidirectional)		■
Status messages		■
Job messages, destination forwarding		■
Job management		■



## Fleet management the intelligent way.

### MAN TeleMatics saves time, money and nerves.

Open up to new ways of efficient fleet management. With MAN TeleMatics Data you can optimise the use of your TGX EcoLion. Cost-effectiveness can be controlled by fleet management, and the interaction of driver and vehicle improved. Find out for yourself and make use of the potential.

### Cost-effectiveness black on white.

Put cost-effectiveness on the test bench. Vehicle analysis as part of the Data service creates transparency in your fleet, and makes for optimal, economical vehicle use. Every single rating is visualised in a diagram. From the individual rating data a cost-effectiveness factor is generated for a total vehicle route.

### Impact on the evaluation of the overall economy

- Time share / operating status
- Consumption / operating status
- Economical engine speed band
- Engine speed profile
- Accelerator position
- Speed profile
- Driving with cruise control (share / consumption)
- Total stopping distance
- Braking behaviour (duration / number)
- Overrun (in relation to distance driven)
- Average crankshaft turns

If you wish to use further functionalities for your scheduling and management, the MAN TeleMatics Dispo service is available to you with a whole range of additional logistics information.

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