



SCANIA TRANSPORTLABORATORIUM AB



START 2008

VALIDATION OF PRODUCTS AND SERVICES

- KNOWLEDGE BASE FOR R&D AND Sales & Services
- TRUE VERIFICATION IN REAL OPERATION
- TELEMETRICS TO SCANIA TECHNICAL CENTRE

SCANIA TRANSPORTLABORATORIUM AB, OPERATING AS A TYPICAL EUROPEAN HAULIER



INTERNATIONAL LONG HAULAGE

- Södertälje - Zwolle
- On the road 24 – 7
- 400.000 km/year
- 3.2 drivers/truck
- Max 80 km/h, average 74 km/h
- Södertälje-Malmö with double trailers

INTER CITY BUS

- Stockholm - Södertälje
- 100.000 km/year
- 1,2 driver/bus
- Max 100 km/h, average 46 km/h



LOCAL DISTRIBUTION

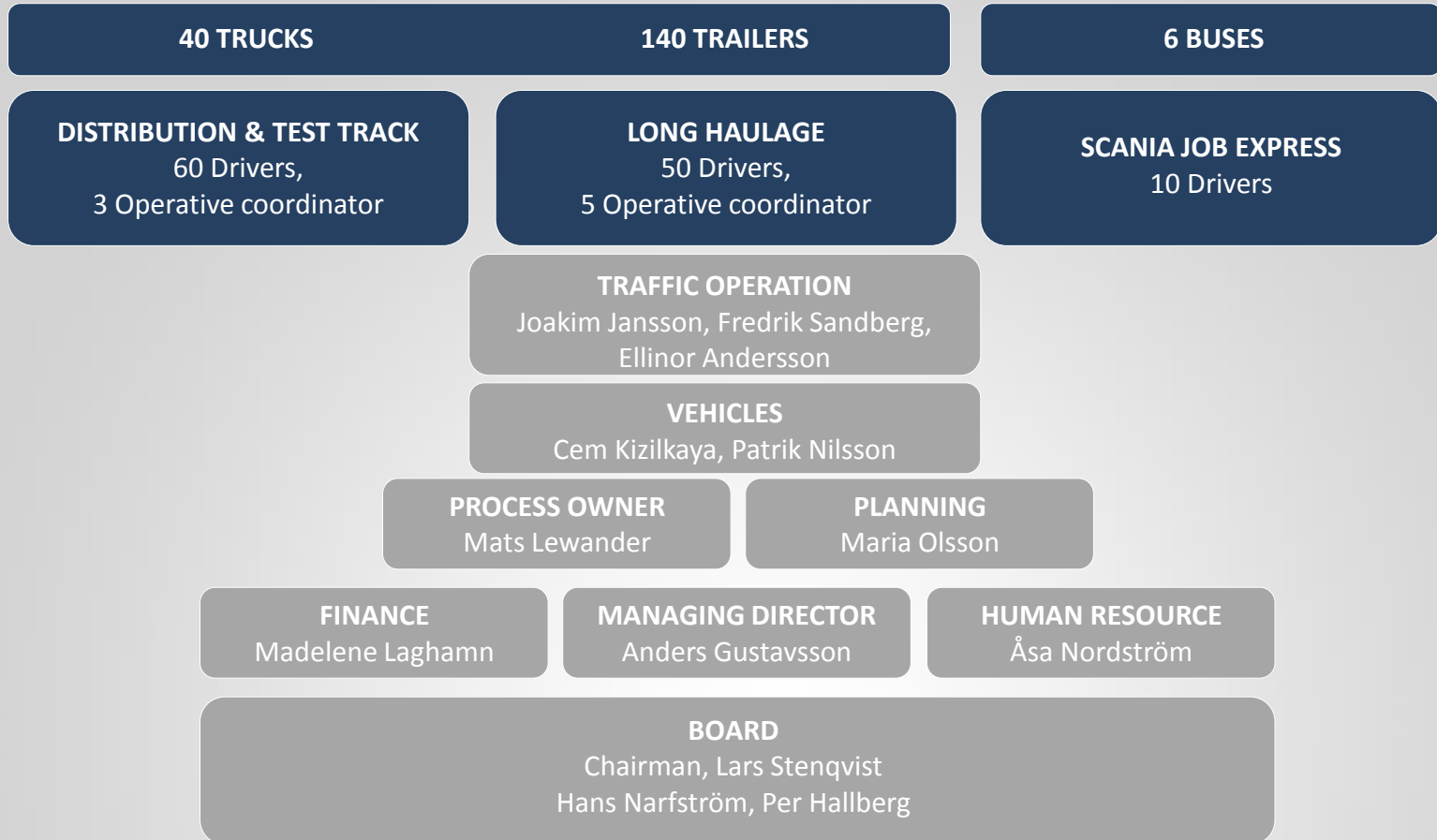
- Pick up and delivery, stop and go
- 30.000 km/year
- 1,5 driver/truck
- Max 80 km/h, average 28 km/h

TEST TRACK

- Fatigue testing
- Surveys
- Operational testing internal



SCANIA TRANSPORTLABORATORIUM AB 2015



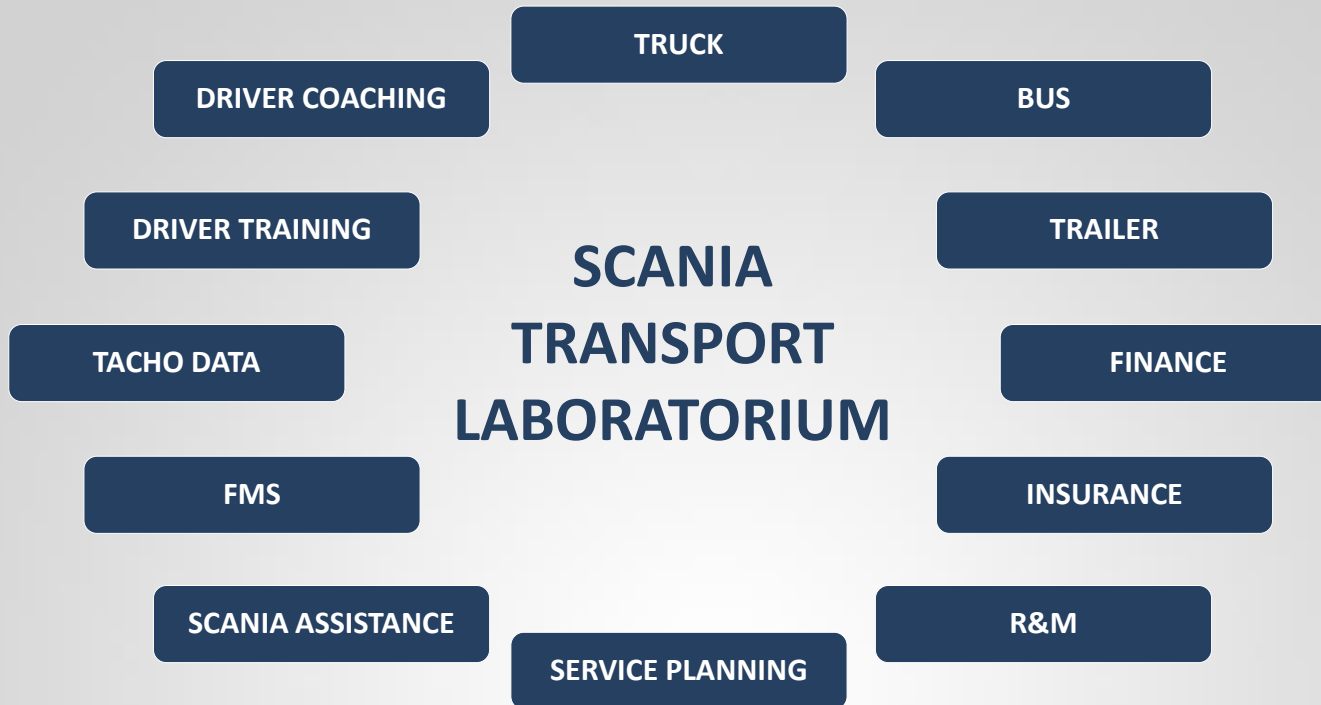
SCANIA TRANSPORTLABORATORIUM AB, STAFF



Our drivers are a mixture of gender, age and experience.



OPTIMISED TRANSPORT EFFICIENCY, BY USING AND CHALLENGING SCANIA SERVICES

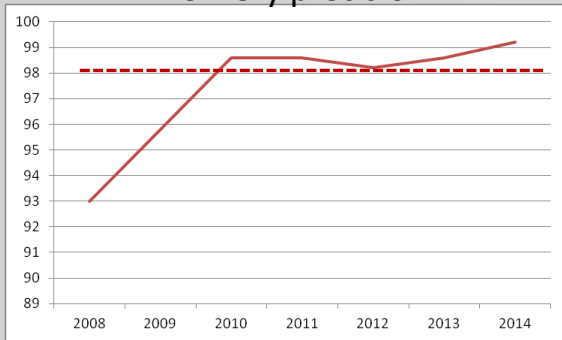


INTERNATIONAL LONG HAULAGE

14 TRUCKS, 400.000 KM/YEAR – 90 TRAILERS, FULLY LOADED – 48 DRIVERS

COPENHAGEN-SÖDERTÄLJE, 630 KM
10 hours/8,5 driving hours

Delivery precision



ZWOLLE – COPENHAGEN, 630 KM,
11 hours/8,5 driving hours

”NORMAL SITUATION”
” FLOW ORIENTATION”

112 WEEKLY LOADINGS



SWEDEN:

- Axles, GTW 36 ton
- Engines, GTW 35 ton
- Gearboxes, GTW 40 ton

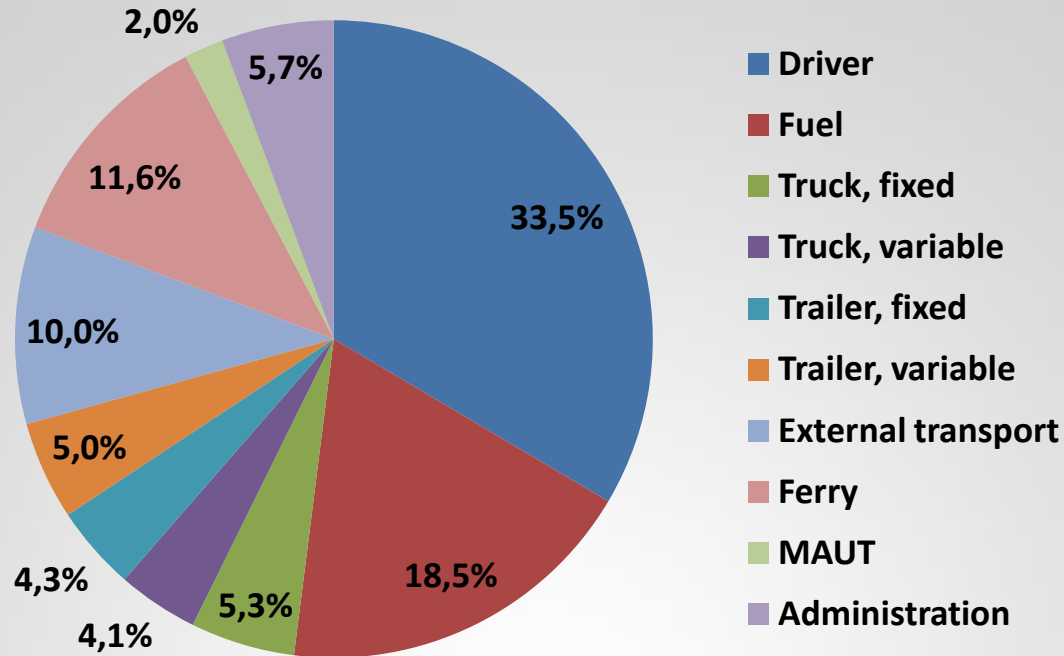


HOLLAND:

- Empty racks, GTW 30 ton
- Air deflectors, GTW 22 ton
- Pallet gods, GTW 40 ton

Average GTW: 34 tonnes

COST SPLIT, LONG HAULAGE 112 WEEKLY LOADINGS



TOTAL COST OF OPERATION (TCO) AND UPTIME

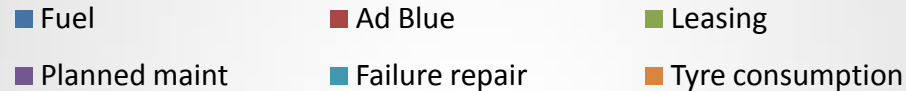
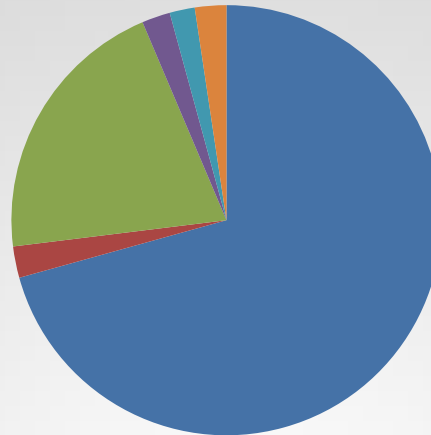


COST: 70% FUEL
UPTIME: >99,8%

TCO AND UPTIME

Type	LA4x2MEB
Mileage, km	1.006.403
Cost	€/km
Fuel	0.32
Ad Blue	0.01 (≈ 3%)
Leasing	0.09
Planned maint.	0.01
Failure repair	0.01
Tyre consumption	0.01
Total	0.46

A TRUCK'S FIRST LIFE



Fuelconsumption l/100 km	27.4
Adblueconsumption l/100 km	1.42
Number of failure	106
Number of unplanned repairs	16
Number of VOR	5
Failures per 100.000 km	10.5

Uptime **99.8%***

* Of the planned operational time

TCO AND UPTIME

FUEL CONSUMPTION, L/100 KM, GTW 34 TON, SÖDERTÄLJE-ZWOLLE

TRUCK	FUEL CONSUMPTION (INCL 1/3 OF ADBLUE)	MILAGE KM	NUMBER OF TRUCKS
Scania Eu5	28.2	6 000 000	6
Scania Eu6	26.6	25 000 000	36
Other Eu5	28.5	3 000 000	3
Other Eu6	27.6	3 000 000	5

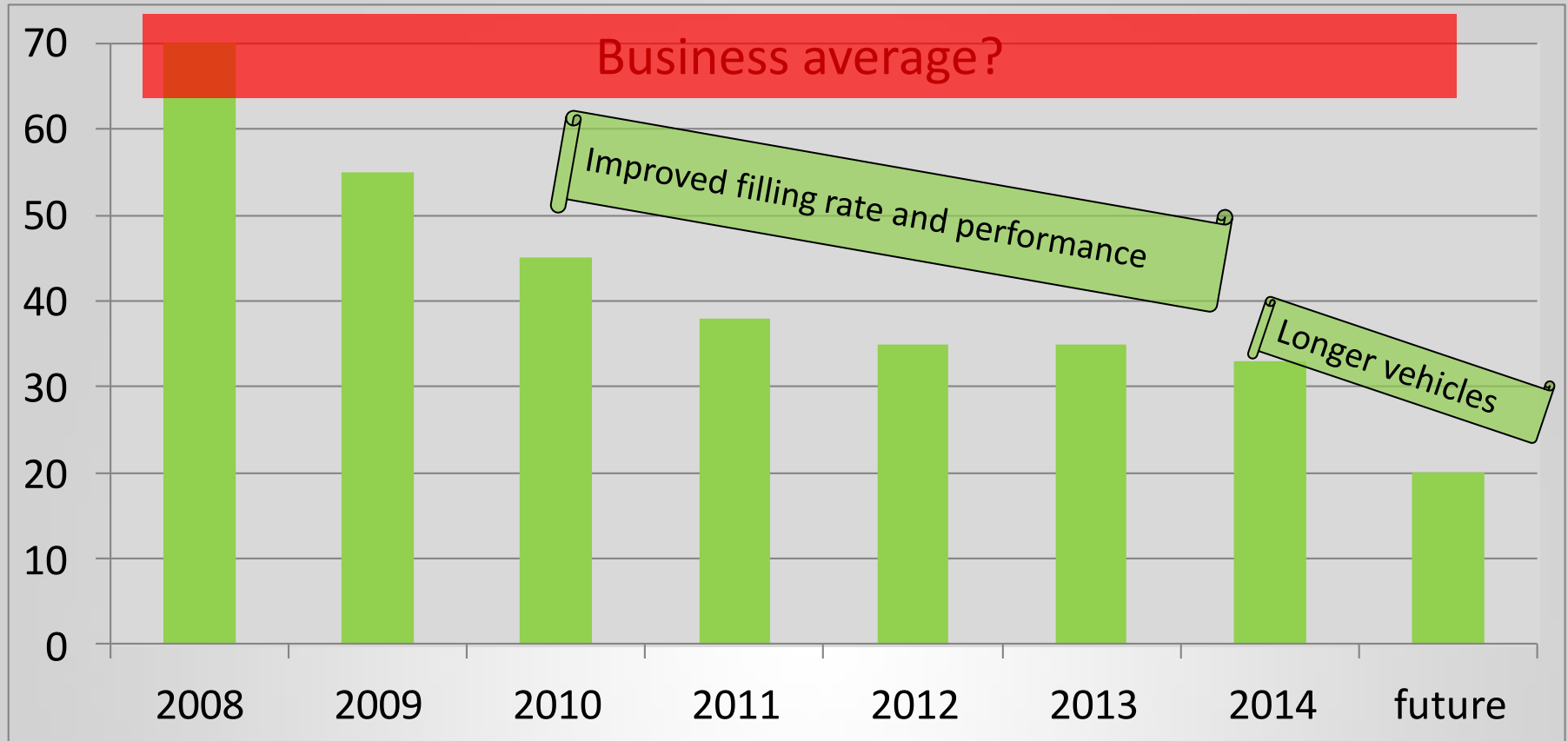
TCO AND UPTIME

FUEL CONSUMPTION, LONG HAULAGE

BUSINESS AVERAGE	35 L/100 KM
TRANSPORTLAB AVERAGE	27 L/100 KM
Truck variation	4%
Trailer variation	6%
Driver variation	8% (30% Initially)
Weather variation	12%
BEST TRIPS	< 20 L/100 KM

TRANSPORT EFFICENCY

CO₂, G/TONKM (1 G=100 TON/YEAR)



NEED FOR SPEED?

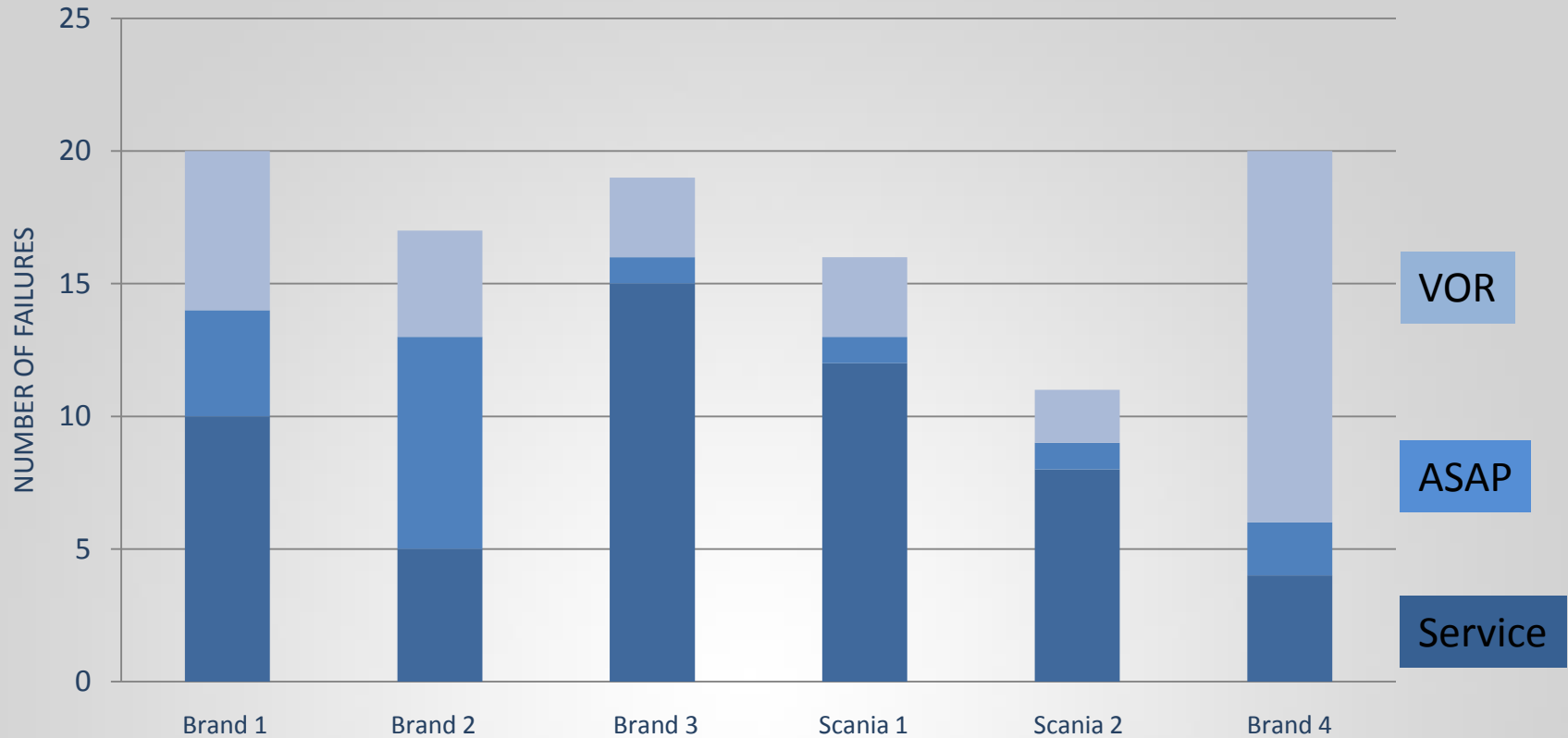
IF YOU DRIVE 90 INSTEAD OF 80 YOU WILL:

- Win 1% time,
- Loose 10 % fuel
- Have higher R&M-cost
- Increase the risk for deadly accidents by 40%

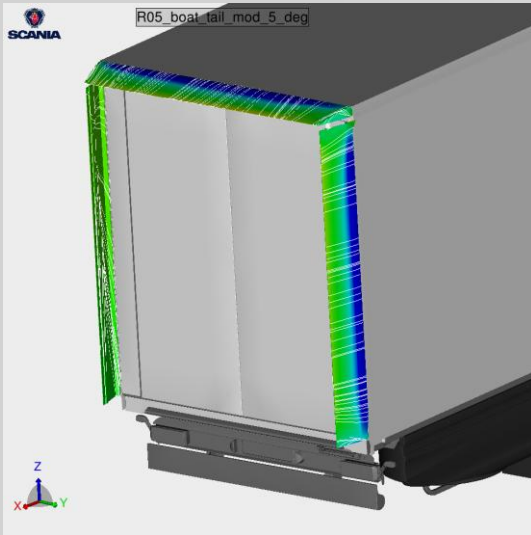


UPTIME - EU 6 RANGE

NUMBER OF FAILURES YEAR 2014



BOAT TAILS



Fuel saving potential 2-4%

PLATOONING



Fuel saving potential 4-23%

LONGER VEHICLES



Double trailers, 31.5 m, <78 ton, 2 daily.
<20 g CO²/tonkm.

TRANSPORT EFFICIENCY

1. TRUCK SPECIFICATION – optimized and dedicated
2. MAINTENANCE – right truck and trailer tuning
3. FLEET AGE – use new technology with high mileage
4. DRIVER TRAINING – no speeding, no idling, no braking
5. TELEMATICS – follow truck and driver performance
6. FILLING UP – use maximum volume and weight
7. WEIGHT AND DIMENSION – harmonized regulation

Thank you!

