TRAFICOM
Finnish Transport and Communications Agency

High Capacity Transport in Finland

Energy and cost efficient transports with trucks up to 34,5 m and 76 t

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Chief Advisor

25,25 m 60 t old standard since 1997 - reference level in Finland

15 years with same rules
People forget that things can change

76 t trucks since 2013

More efficient timber transportation was a key reason in the background

EMS2 trials 11/2013 ->

The first application
And the firs permit

2013-2018
14 milj. km

36 trucks in the end

The first high speed test 7/2013

Authorities take a big risk if they don't allow challenging trials

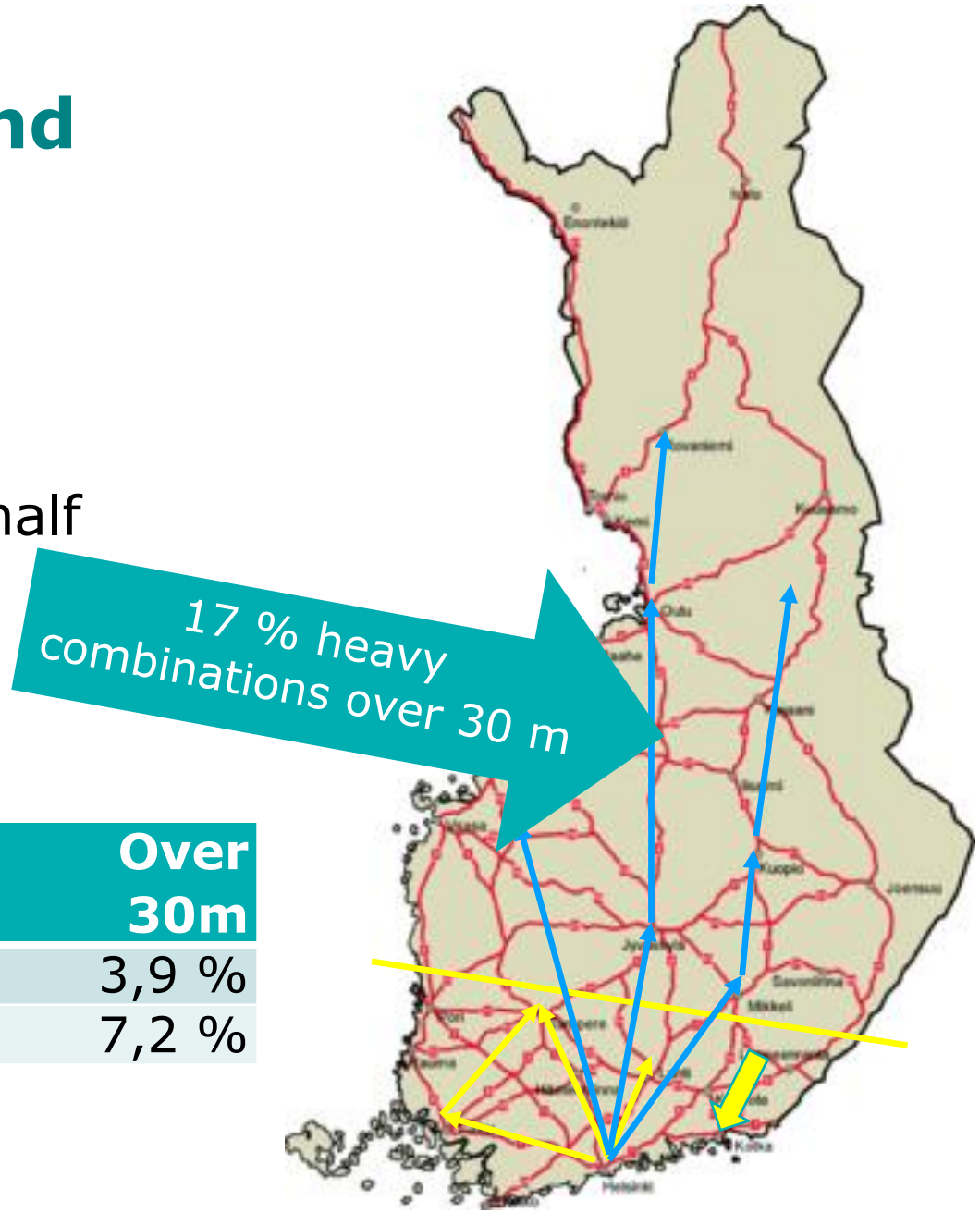
Several major and many local transport companies took part to trials

Comparing different prototypes and driving lines in real traffic

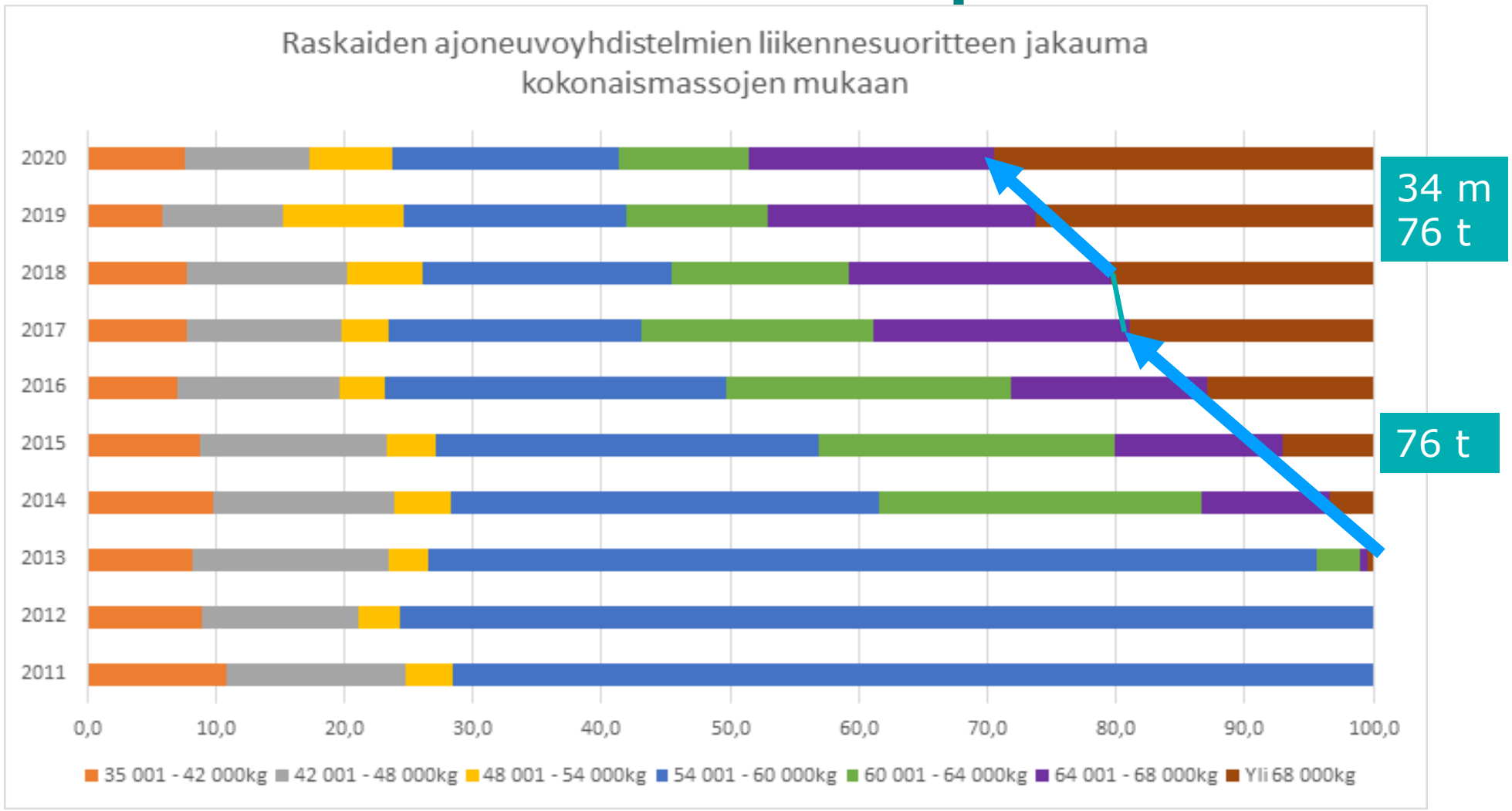
EMS and EMS2 traffic in Finland

- Km travelled with heavy combinations 50:50 south and rest of the country
- After 2,5 years EMS2 is used almost in half of the transport over 300 km

2021	16,5 m	22 m	25,25 m	28 m	Over 30m
South	42,9 %	19,5 %	28,0 %	5,8 %	3,9 %
Other	25,5 %	22,6 %	37,0 %	7,7 %	7,2 %



The transport sector is rapidly adopting more efficient trucks in domestic transport



Right length for every use

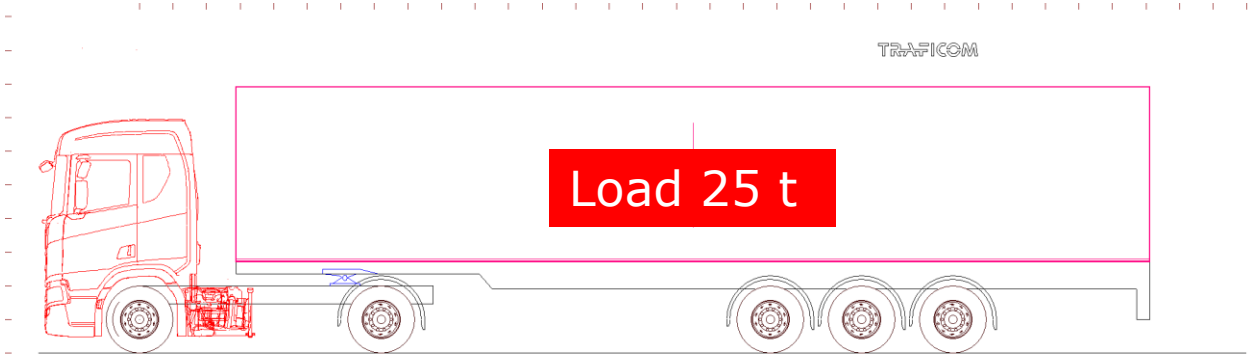
Tailor made truck and full trailer combinations to local needs

76 t Finnish A-double

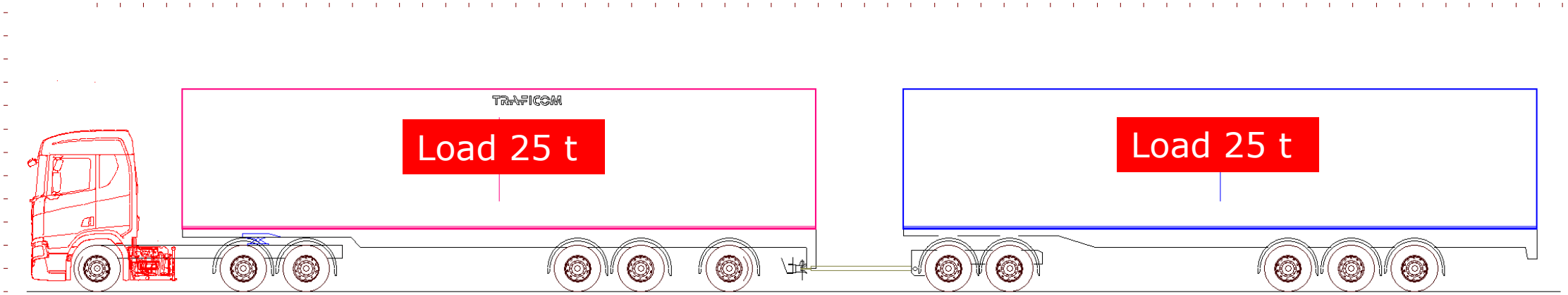
Road friendly solution for heavy loads

Compared to 2x standard semitrailers one axle more and 4 t less weight

14 % less weight /axle
The important number is road load compared to payload



Truck 8 t + trailer 7 t
Standard 40 t truck

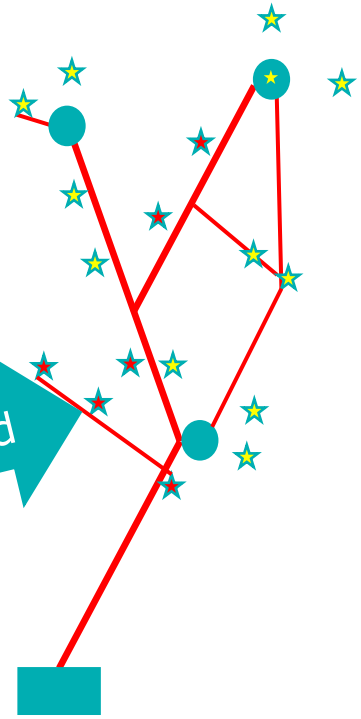


Truck 9 t + trailer 7,5 t + dolly 2,5 t + trailer 7 t
Standard Finnish 76 t A-double

Strict PBS rules for trucks and big network or Limited stiff network but simply rules for trucks?

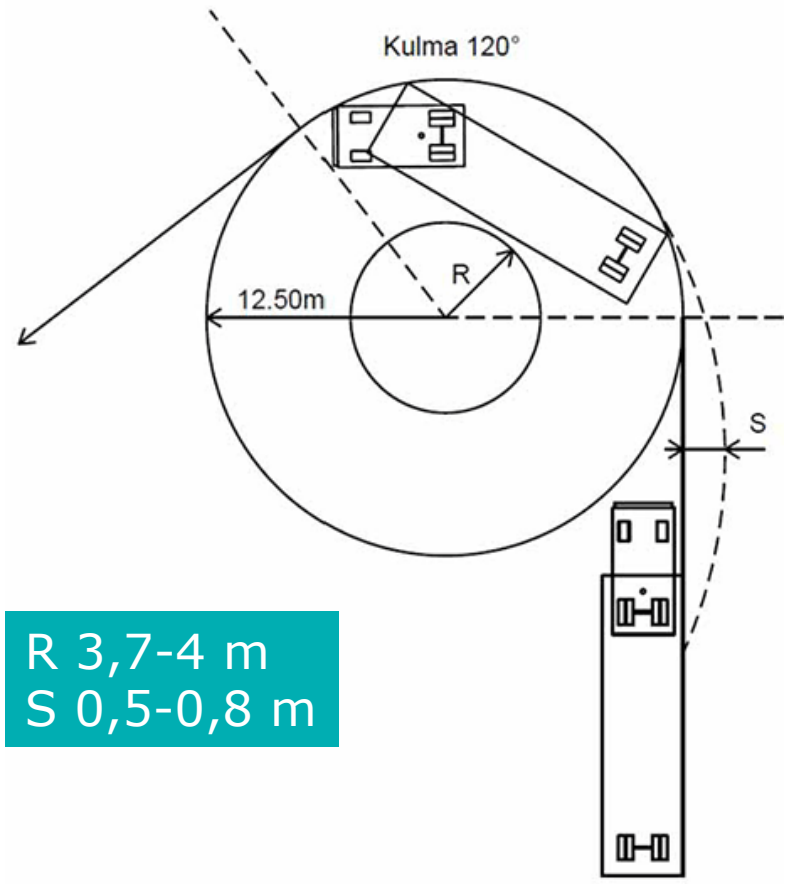
Theory

Reality



Easier then you think

The rule and how you monitor the 4 vehicle combination



R 3,7-4 m
S 0,5-0,8 m

[mm], rear bogie is zero point							
Lppv	Ltpv	Lvk	Lva	Lty1	Lty2		**inside r; R 12,5 120-ast**
7700	7700	-3300	4100	-4300	-4300		3686
		neg		neg	neg	min	3700
l_{ppv} 1.trailer kingpin to bogie turning point							
l_{tpv} 2.trailer kingpin to bogie turning point							**Tailswing**
l_{vk} 1. trailer bogie tunrning point to coupling						1 PPV	286
l_{va} dolly length						2 PPV	229
l_{ty1} 1. trailer bogie turning point to trailer end						max	800
l_{ty2} 2. trailer bogie turning point to trailer end							

Light goods, long distances, tight schedules, flexible service

CO2 reduction is still possible

- High Capacity Truck, EMS2
- Efficient loading
- Latest engine technology

Thank you for your interest and attention

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