Intelligent truck parking workshop

Prien am Chiemsee – 25.-26.03.2015

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

Agenda / 25.03.2015

Time	Topic	Lead
09:30	Welcome	Rainer Scharrer / Stephanie Kleine
09:45	Introduction and key note speech	Karl Fischer / LKZ Prien GmbH
10:15	Current status of secure truck parking in Europe	Ton Barten / Barten Management and Consultany
	Improvements in safety and comfort for truck drivers along the Brenner motorway	Ilaria De Biasi / Autostrada del Brennero
	New methods to increase the capacity of rest areas in Germany	Rainer Lehmann / BASt
12:00	***Lunch***	
13:00	Thinking about truck parking and relations with other truck parking system players	Maurizio Alessandro / Serenissima Trading
	ITP projects in Bavaria	Jürgen Neugebauer / Autobahndirektion Südbayern
	ITP projects in Rhineland-Palatinate	Rainer Dölger / Ministerium des Innern, für Sport und Infrastruktur Rheinland-Pfalz
14:45	***Short coffee break and visit of Herrenchiemsee New Castle***	
17:00	Automatic truck detection system based on ground sense and side laser scanner	Bernhard Nichoj / Voltra GmbH
	Automatic truck detection system based on ANPR cameras	Cezary Dolega / Neurosoft GmbH
	Summary of day 1	Karl Fischer / LKZ Prien GmbH
18:00	***End of Meeting***	

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Agenda / 26.03.2015

Time	Topic	Lead
09:30	Introduction and short summary of day 1	Karl Fischer / LKZ Prien GmbH
10:00	The MAVE®- IPark System and its deployment in the port of Hamburg	Dr. Peter Böhnke / ave Verkehrs- und Informationstechnik GmbH
	Presentation of “TruckYa” App	Luis Lehmann / Continental AG
11:30	***Coffee break***	
12:00	Datex II ITP profile implementation experience	Jürgen Neugebauer / Autobahndirektion Südbayern
	DATEX II ITP profile and implementation / EU regulation 885/13	Josef Kaltwasser / Ursa Major Project Management support
13:00	***Lunch***	
14:00	Practical input / practice expert	Sebastian Lechner / CEO Association of Bavarian transport and logistics operators
15:00	Workshop discussion	
16:00	Summary of day 2	Karl Fischer / LKZ Prien GmbH
16:30	***End of Meeting***	

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LOGISTIK
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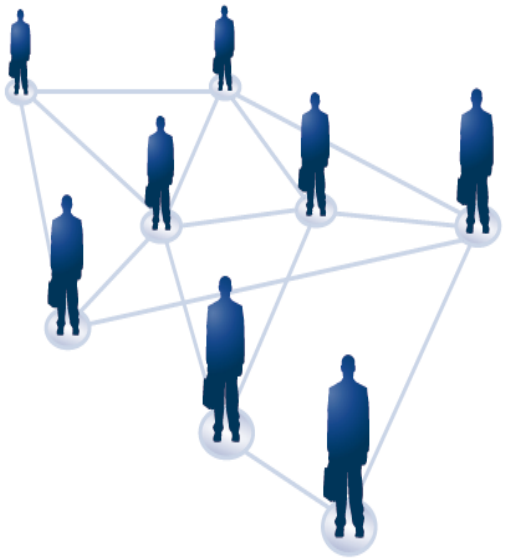
ZENTRUM
Logistic know-how under one roof

LKZ develops, controls and coordinates innovative logistic know-how across the borders.

We bring together all parties of the logistic chain and design and optimize processes. This way secures workplaces and sites.



Logistic – the resolution method

LOGISTIK KOMPETENZ ZENTRUM

We acquire and design projects– from primary contact to implementation

Innovative	**solution oriented interdisciplinary cooperation Green Field Concept**
Solid	**high equity: 602.600 €**
Neutral	**independent not a classical consulting company**

The umbrella organisation: LKZ Prien GmbH

LOGISTIK KOMPETENZ ZENTRUM

District Administrator Wolfgang Berthaler

Administrative district Rosenheim, approx. 250.000 inhabitants

Mayor Jürgen Seifert

Market township Prien, approx. 10.000 inhabitants

Head of Unit Transportation and Logistics Dr. Herbert Vogler

Approx. 330.000 companies as members

IHK
Industrie- und Handelskammer für München und Oberbayern

LKZ Prien: Private limited company with shareholders under public law

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Unternehmen im LKZ

Fraunhofer IML
protime GmbH für Informationslogistik
bitact business it solutions
maytec.net
head electronic
LGT INSTITUTE
SKYANIDE CHEMICALS
Lange & Fendel Software
Rudolf Mayer Beratungsgesellschaft
DIA CONNECTING SOFTWARE
BAG COMPANY
certus Lösungen sind von uns
Berendson und Partner
CCMS CONTACT CENTER MANAGED SERVICES
EPC

Virtuelle Partner

commea T.E.C. traffic engineering & consulting Dr.-Ing. Friedrich Maier
PERSONAL GPS SOLUTIONS GPS NAVIGATION FÜR SPORT, OUTDOOR & TOURISMUS
doll + leiber
one
spreadFILMS Von der Idee zum Film
Anschluss Bahn Profis Wir optimieren maximal.
EBERL Internationale Spedition GmbH & Co. KG
IPL
ipro medical consulting
ifp consulting
TELEKOMMUNIKATION
ROSPED NEUE IDEEN FÜR LOGISTIK
SCHUNCK GROUP Internationaler Assekuranz-Makler
MIK IT

Kooperationspartner

Bayern Innovativ
Hochschule für angewandte Wissenschaften FH München
Cluster Logistik
Hochschule Rosenheim University of Applied Sciences
Universität Bayreuth
Technische Hochschule Ingolstadt
EURAC research
Fraunhofer IIS
Logistik Agentur Oberfranken

Our Network always offers a solution

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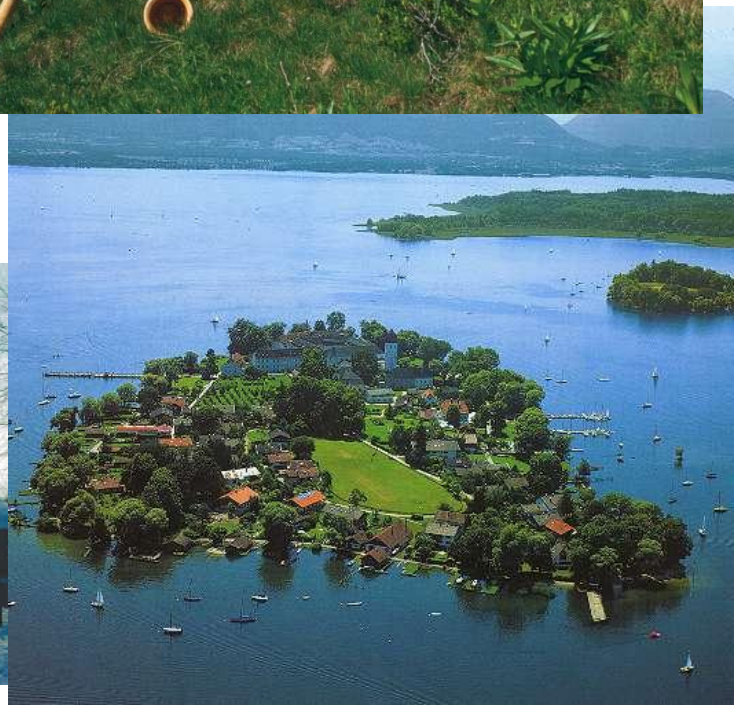

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Constitutional Convention Herrenchiemsee

- 1948 August at Chiemsee island
- Old Castle of Herrenchiemsee
- Development of a Constitutional Convention

Every 2 years: Official state reception

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CHALLENGES OF FREIGHT TRANSPORT – NOW AND TOMORROW

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Transport speed decreases

- Congestion, limitations on night driving,…

Increasing cost pressure

- Toll, diesel, new technologies
- minimum wage
- …

Longer transport routes

- more international freight transport
- less predictable tours

Challenges in road freight transport

Shortage of professional drivers

- low share of young drivers
- high proportion of professional drivers over 50 years

Rise in qualitative requirements

- technical, linguistic and cultural know-how

Additional logistics services

- Load securing
- Pallet exchange
- …

Current situation & challenges in road freight transport

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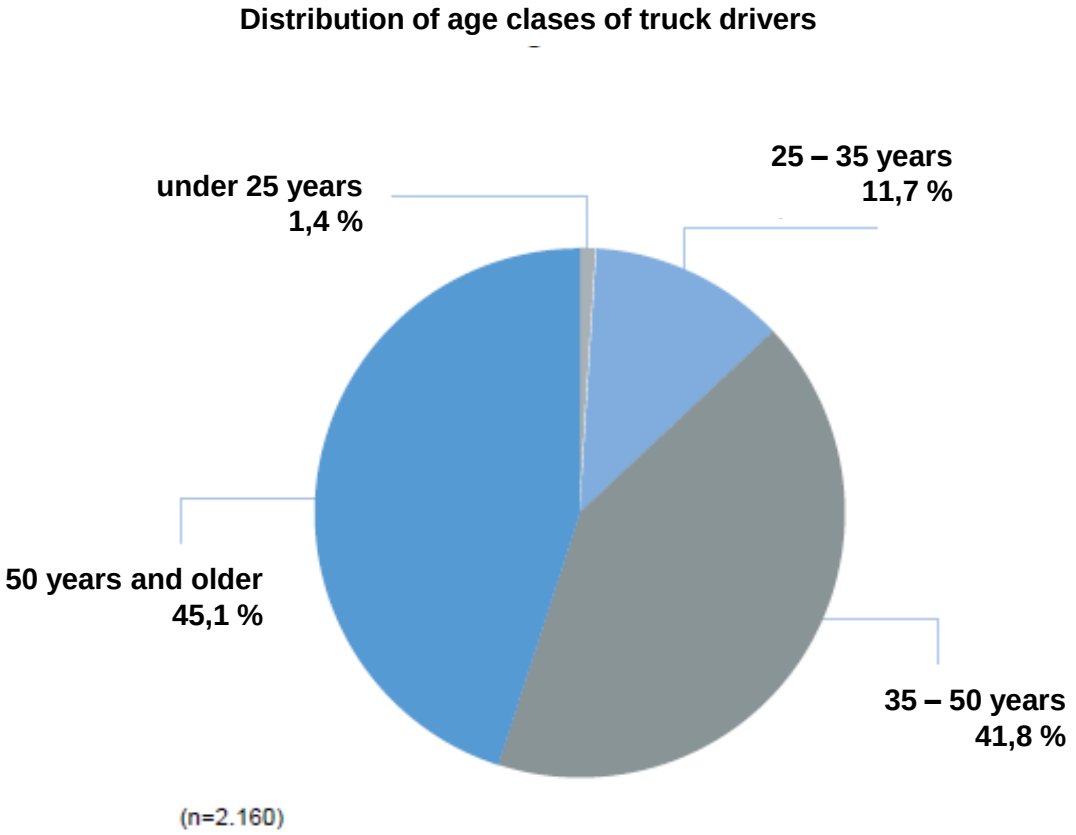
Shortage of drivers:

- Increase of driver shortage
- Motivated and skilled drivers are rare
- Expensive driver training
- 25.000 drivers quit p.a. but only 15.000 start as a truck driver



Source: ZF-Zukunftsstudie Fernfahrer 2.0 / Mensch in Transport- und Logistikmarkt / 2014

- **Structural causes**
  - Lack of parking
  - Lower wage compensation
  - Low autonomy
- **Social causes**
  - Less social contacts
  - Often low appreciations
  - Unhealthy way of live
  - Safety concerns
- **Technological causes**
  - Often uncomfortable cabin equipment
  - Traffic conditions
  - Increase of traffic volume
- **Organizational causes**
  - Fines for exceeded driving time
  - Night and shift work

Reasons for shortage of drivers

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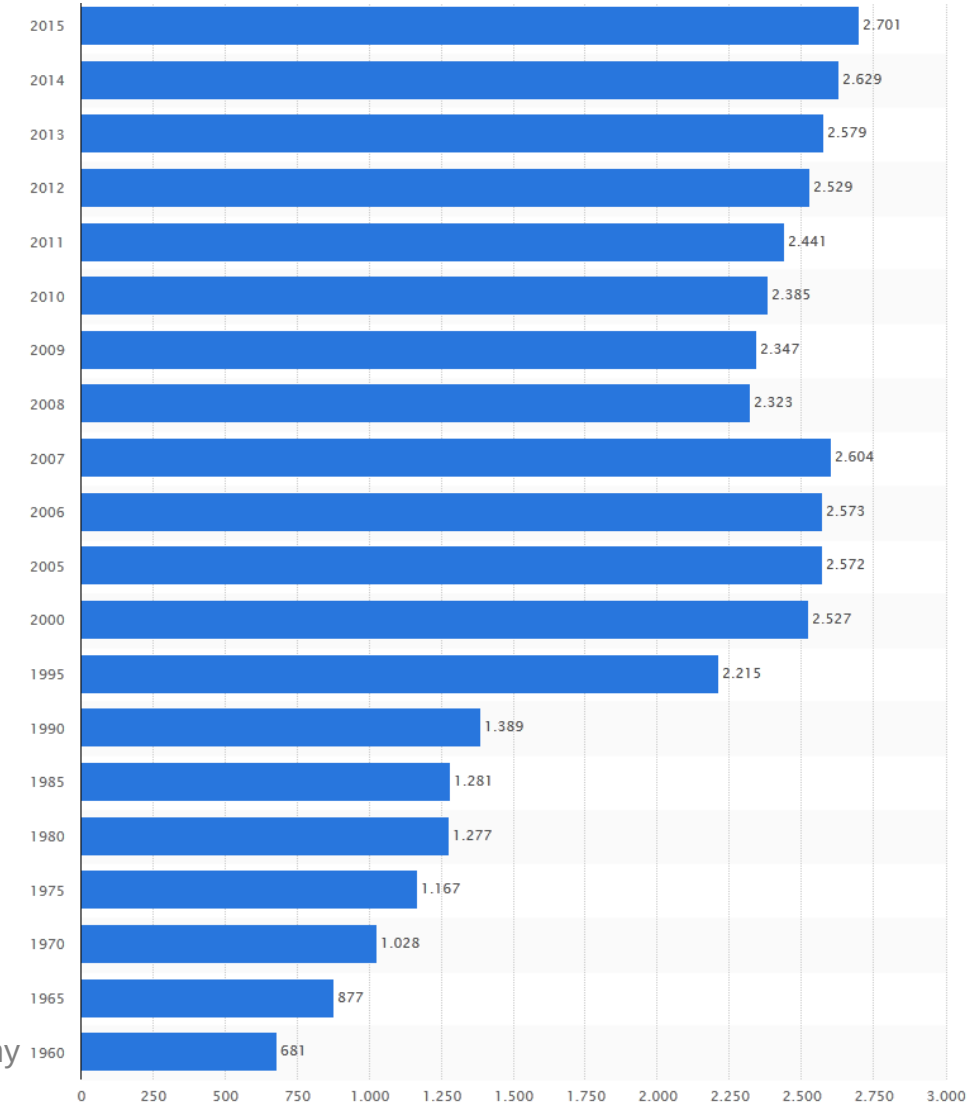
Number of trucks in Germany is growing



Source: statista / number of registered trucks in Germany (in 1.000)

Number of registered trucks in Germany

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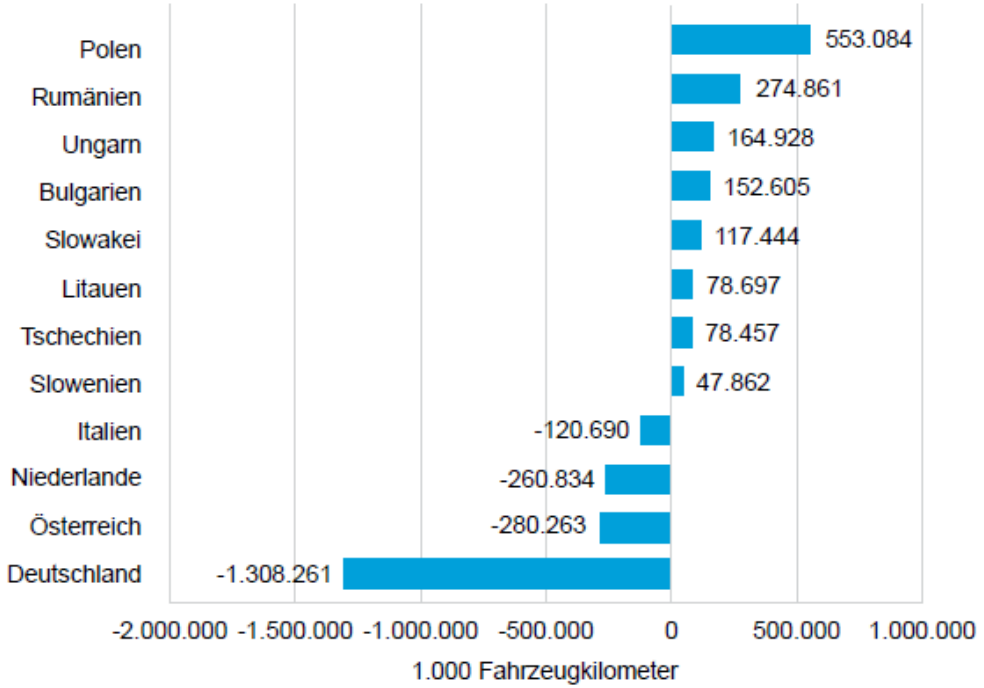
Truck drivers by nationality on German higways

- The percentage of truck drivers from Eastern Europe is increasing
  (from 2007 to 2012)

Entwicklung der Fahrleistung schwerer Lkw auf Autobahnen nach Nationalitäten[10]



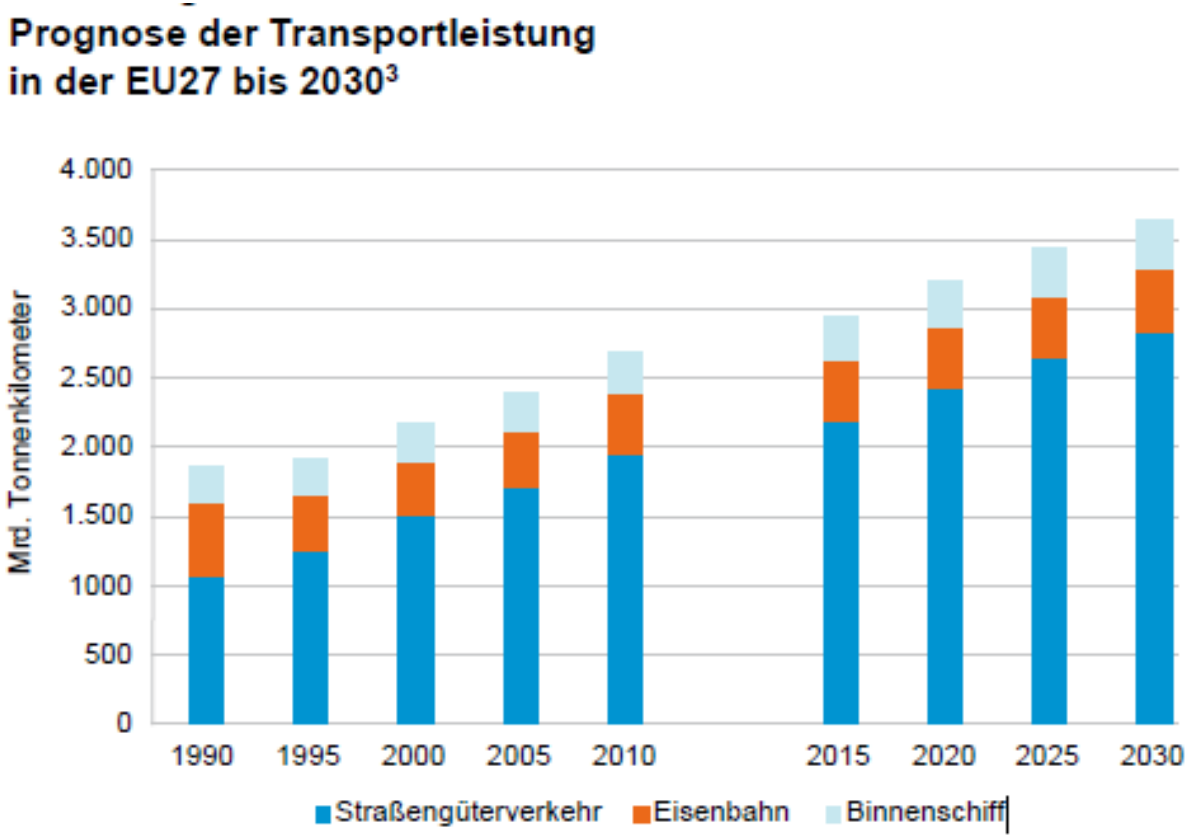
Source: ZF-Zukunftsstudie Fernfahrer 2.0 / Mensch in Transport- und Logistikmarkt / 2014

Foreign freight forwarders have to pay the **minimum wage** for truck drivers (8,50 €/h gross):

- For all trucks which are loaded and unloaded in Germany
- Transit traffic under discussion

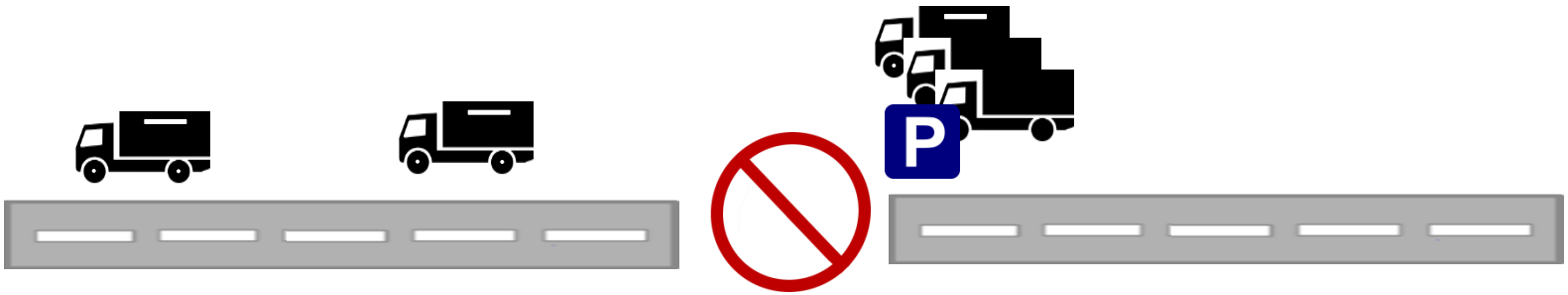
very high liability obligation and
administration obligation

Increase of freight transport in Europe until 2030



Source: ZF-Zukunftsstudie Fernfahrer 2.0 / Mensch in Transport- und Logistikmarkt / 2014

- Short driving bans/ rest times → short-term parking spaces
- Long rest times (09 h – 11 h) → long-term parking spaces
- Weekend rest time (e.g. Sunday) → long-term parking spaces
- Holidays → long-term parking spaces near the borders



Bavaria: 06.01. -> no driving ban

Austria: 06.01.-> driving ban

Bayern				
Anlagentyp	**Anzahl Erhebungs-standorte**	**Kapazität**	**durchschnittlich abgestellte Lkw in den Nacht-stunden**	**Fehlbestand**
bewirtschaftete RA	69	3.111	5.269	2.158
unbewirtschaftete RA	349	3.764	4.791	1.027
Autohöfe	45	4.313	3.401	-912
Grenzzollanlagen	1	88	32	-56
Nothaltbuchten bzw. Standstrei-fen ohne Bezug zu einer RA	0	0	0	0
sonstige Abstellorte ab-seits der BAB	4	107	76	-31
Summe	**468**	**11.383**	**13.569**	**2.186**

Source: LKW Parken auf BAB / 2014 / DTV Verkehrsconsult GmbH

More parking spaces needed!

Truck parking capacities in Bavaria

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Short-term parking (short breaks)

- next to the road is possible

Long-term parking (night, weekend, long daily rest)

- near the woods, away from the road

Pictures: wikipedia (left), Holzkirchner Stimme (right)

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CHALLENGES FOR TRUCK DRIVERS – NOW AND TOMORROW

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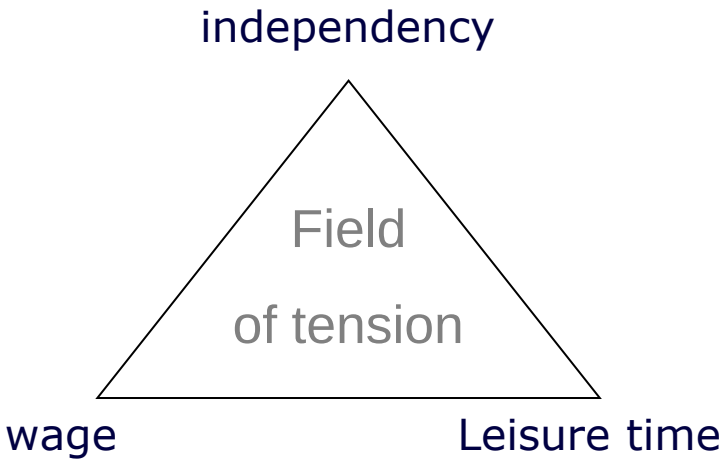
truck drivers in Germany

- Increasing transport routes
  - → More transnational freight traffic
  - → shift and night work

- lower transport speed
  - → **traffic** jam, ban on night time driving, speed limits, ..

- additional logistic services
  (cargo securung, loading and unloading,…)
  - → **pressure for truck driver** increasing



- **Higher requirements** for drivers
  - → navigation systems, tracking & tracing, regulations
  - → Technical Know-how
  - → Languge Know-how
  - → Cultural Know-how

- Too less training for new drivers

Equipment:
- no cell phones
- Phone calls only possible in rest areas
- only radio (Funkgerät) with range of max. 15 km

Equipment:
- digital radio with DVD Exchange
- TV with DVD-Video
- CB radio
- cell phones with internet access

Data protection!!!

Truck equipment until today

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Daily driving time	
Before 2006 VO (EWG) 3820/85 / AETR	**Since 2006** VO (EG) 561/2006
- max. 9 h - 10 h twice a week allowed	- max. 9 h - 10 h twice a week allowed
Weekly driving time	
- No regulation - doubleweek max. 90h	- max. 56 h per week - doubleweek max. 90h

-> higher resting times

-> lower driving times allowed

-> more parking lots needed!

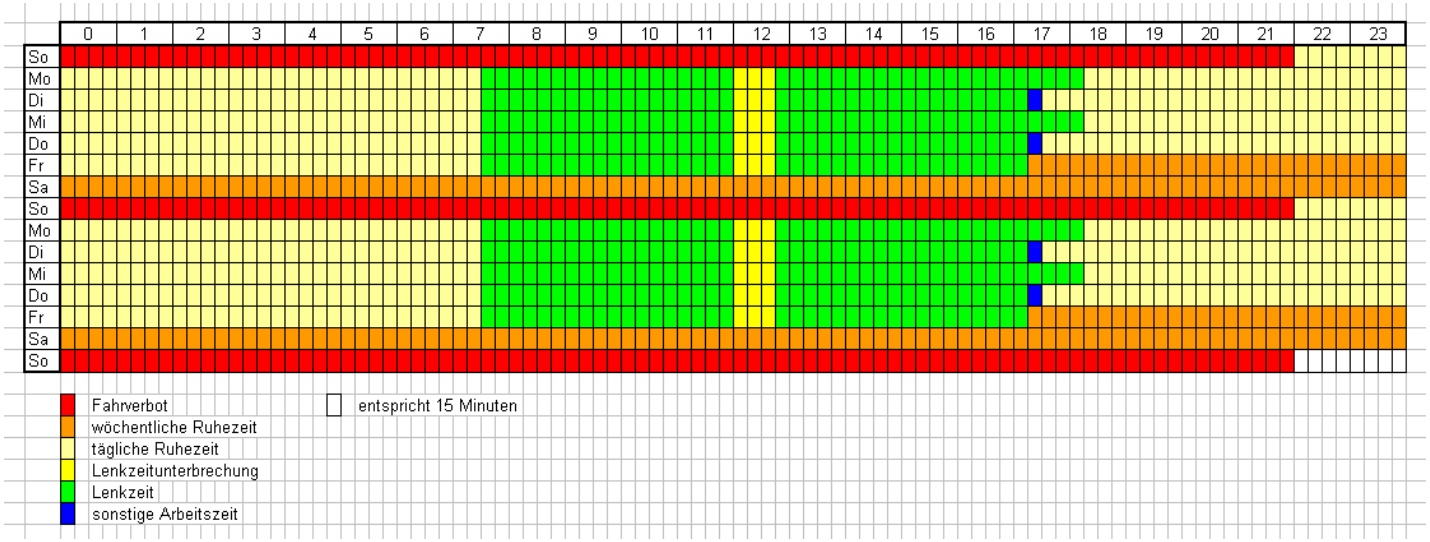
Source: LKZ Prien GmbH

Max. driving time vs. max. working time	
Max. driving time VO (EG) 561/2006	**Max. working time** regulation 2002/15 EG
before 2006: no regulation after 2006: max. **56 h.** per week	Before 2006: 113 h double week -> **56,5 h/week** after 2006: **average 48 h**

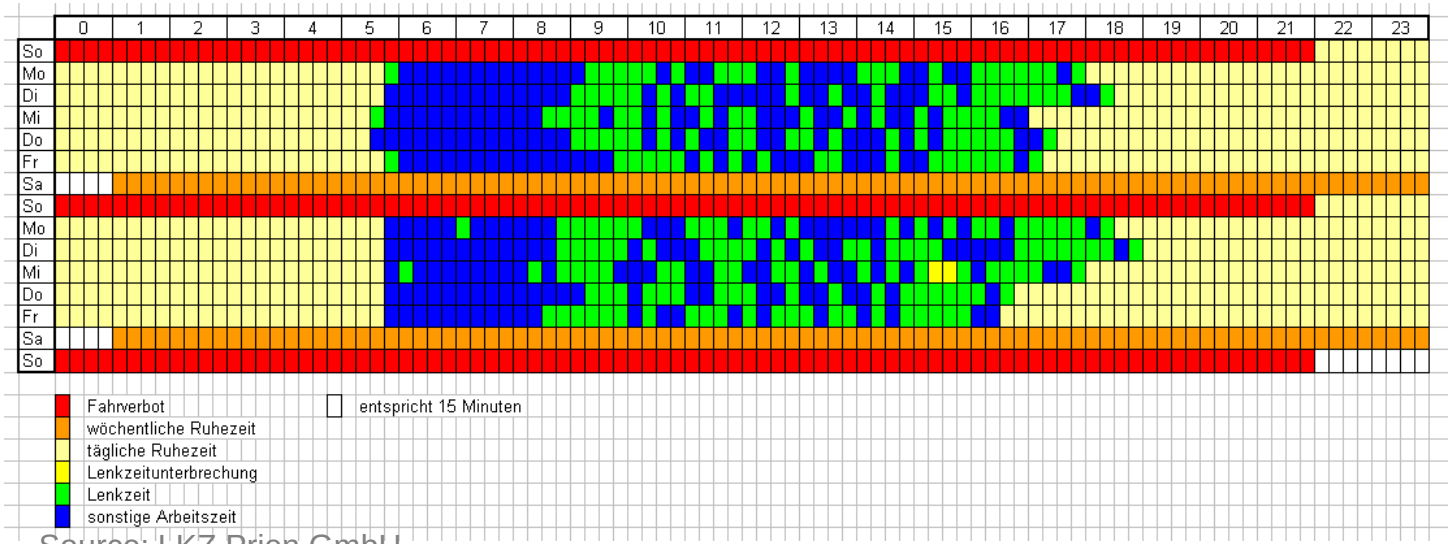
16,7 % less working time allowed

16,7 % more parking spaces needed

Source: LKZ Prien GmbH



IDEA:
New driving time / 48 h working time



ACTUAL:
local transport with data assessment

Source: LKZ Prien GmbH

EU guidelines: working time and driving time

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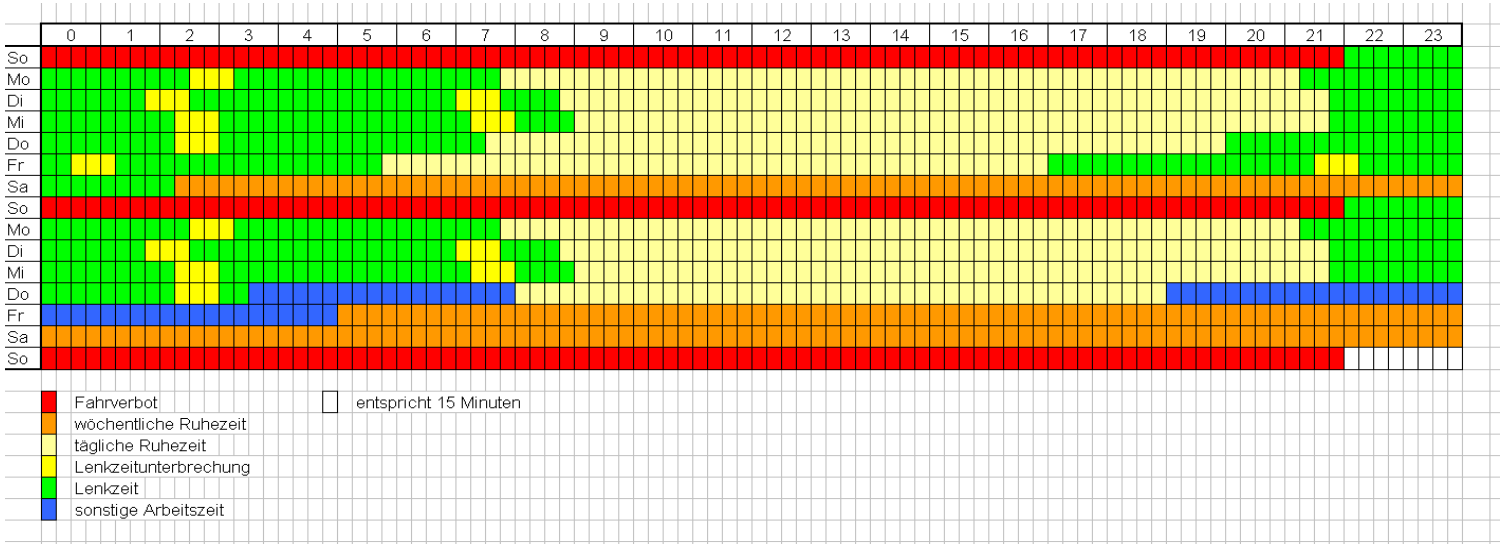
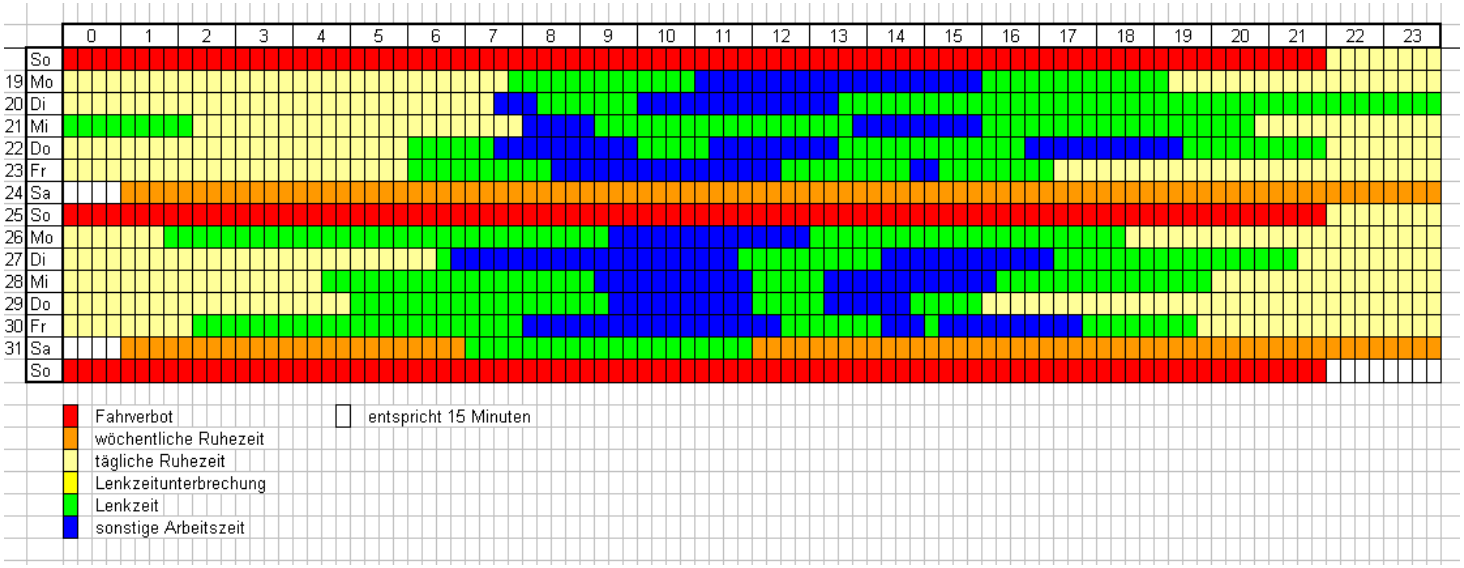


IDEA:
New driving time / 48 h working time



ACTUAL:
long distance-transport with data assessment

Source: LKZ Prien GmbH

EU guidelines: working time and driving time

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punishable offence 2015	Fine for the truck driver	Fine for the employer
Fall below the daily rest time		
Till 1h	30 €	
Till 3 h, per partial hour for	30 €	90 €
More than 3 h, per partial h	60 €	180 €
Fall below the bracke time		
Till 15 min	30 €	90 €
More than 15 min, per partial 15 min	60 €	180 €
Outrun the daily driving time		
Till 1h	30 €	
Till 2h, per partial 30 min	30 €	60 €
More than 2h, per partial 30 min	60 €	180 €
„Driver card" (not) carried on bord		
… therefore control not difficult	75 €	
… therefore control difficult	250 €	

Source: http://www.bussgeld-info.de/bussgeldkatalog-lenkzeiten-ruhezeiten/

Fines catalogue

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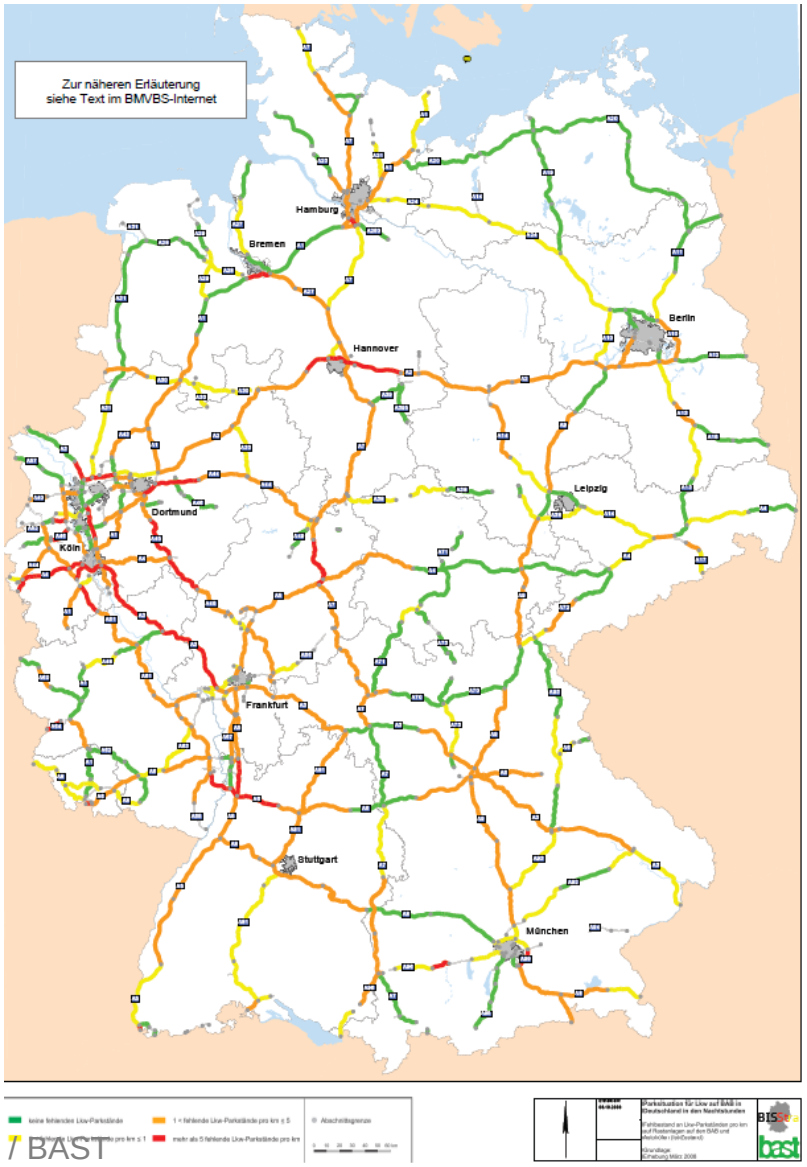
- According the ministries around 43.000 truck parking spaces are available on German roads
- until 2015: 18.000 new parking facilities are planned but approx. 28.940 are needed
- Demand for parking areas will grow by 4 % by 2025



Graphic: shortage of truck parking zones in Germany during night time, 2008 / BAST

Less driving time – more parking spaces

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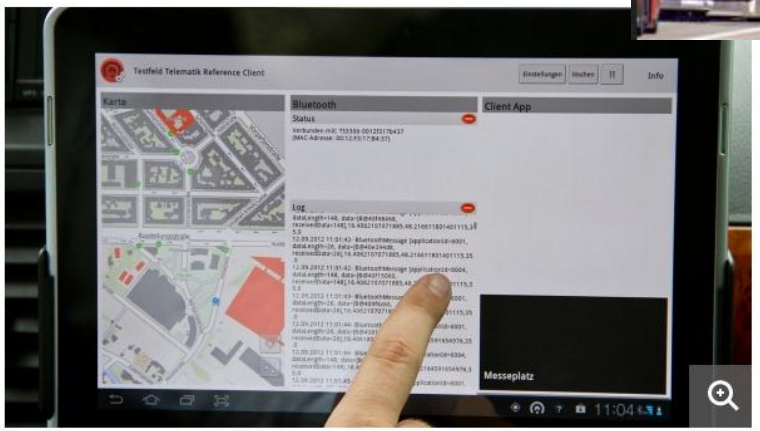
- Implement intelligent telematic systems
- Apps can help to find available parking spaces



Source: Different internet sources

Telematik system

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- Increased number of parking spaces by efficient parking space utilization
- No need to create new parking areas
- System works independently with distance measurements

Examples:

Compact parking and convoy parking

German Federal Minister of Transport Alexander Dobrindt:

2.8 billion Euro of the EU should be invested in transit routes in Germany.

The biggest part for rail traffic.

Süddeutsche.de

Dobrindt beantragt 2,8 Milliarden Euro Fördermittel

Bundesverkehrsminister Alexander Dobrindt (CSU) will das nun ändern. Denn bis 2050 soll der Güterverkehr in Europa Prognosen zufolge um 80 Prozent und der Passagierverkehr um 50 Prozent zunehmen. Gerade Deutschland als Transitland wird davon besonders betroffen sein - auf der Schiene, aber auch auf der Straße oder den Wasserwegen. Deshalb hat Dobrindt jetzt die Rekordsumme von 2,8 Milliarden Euro Fördermitteln bei der EU beantragt. Nie zuvor hat ein deutscher Verkehrsminister einen so hohen Betrag von Brüssel für Deutschlands Verkehrswege gefordert. Damit sollen in Deutschland 30 Projekte in den Bereichen Schiene, Straße, Wasserstraße und Seehäfen gefördert werden. Der weitaus größte Teil der Gelder, 2,5 Milliarden, ist für Schienenprojekte gedacht.

Source: 23.03.2015 / Süddeutsche Zeitung

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- No change at the trailer
- No change at the wagon
- Use of existing handling facilities (crane, reach stacker, measures and standards, ...)
- No change in business processes
- Low-cost solutions to compete with road transport

Requirements for an innovative solution

1. Drivin in to the NiKRASA terminal platform with NiKRASA-transport platform

2. Lift of the NiKRASA-transport platform platform with non craneable trailers

3. Insert of the NiKRASA-transport platform with non-craneable trailers in pocket wagons

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