

**“Paradigm shift in
insurance policies”**
ADAPTIVE technical workshop

Athens, April 2016

 **INTERAMERICAN**

- Driverless cars & need for insurance
- Shift of Motor Insurance model
 - ✓ Motor liability
 - ✓ Product Liability
 - ✓ Data ownership & privacy
 - ✓ Cyber Liability
- CityMobil2

Eurapco trend analysis is pointing out that self driving cars “will reduce need for insurance”

Shift of the business model is expected in the coming 25yrs as described in the analysis prepared for EMDP project

“When & How self driving cars will dominate the car industry based on technology & regulation”

Gathering intelligence that will allow the Eurapco alliance companies to anticipate the future of motor insurance

Self Driving Cars

EMDP (Eurekans) project



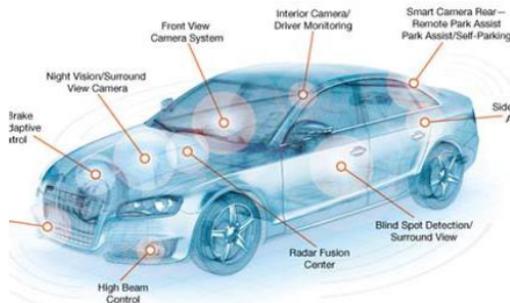
Claudia Wagner, Peder Bjorling,
Patrick Wilhelm, Panos Kouvalis

EURAPCO — Creating value together —

NEW TECHNOLOGY REDUCES NEED FOR INSURANCE

Trend number: 39

Driver Assistance System Applications

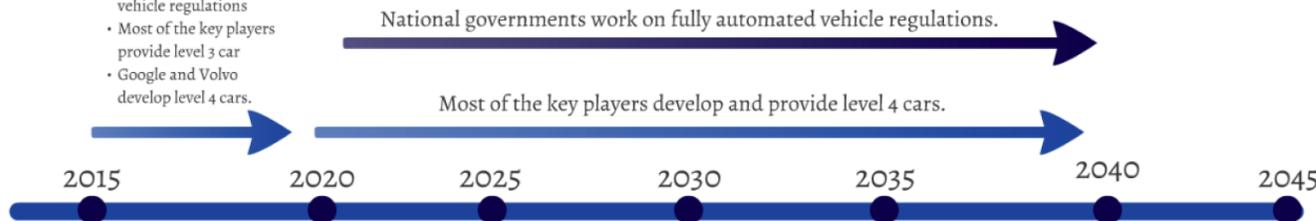


Customer quote

Autosalon Geneva 2015 - Eva Molnar, Director of the Transport Division of the United Nations Economic Commission for Europe (UNECE) said: “Surprising for me to see representatives from the insurance industry here – most of the visitors of our exhibition are engineers and politicians”

Trend data graphs

- International governments work on highly automated vehicle regulations
- Most of the key players provide level 3 car
- Google and Volvo develop level 4 cars.



Trend in a tweet:

Technology may make classic insurance unnecessary. As an example, Autonomous Vehicles (self driving cars) will increase mobility, reduce pollution, create free time and improve traffic efficiency, but also dramatically decrease road accidents. Also, the car producer rather than the driver may be the liable party

Eurapco scores



Connected trends

- 30 Advanced Analytics and Big Data
- 33 Low Power networks are transforming risk mgmt
- 24 Technology enables new business models
- 29 Connectivity ever more ubiquitous
- 11 Influence of supervisors keeps growing
- 04 Changing demographics
-

Opportunities for the Partners

- New risks to insure
- New business models (e.g. sharing economy)
- Usage based insurance

Challenges for the Partners

- Disruption of core business lines, loss of position in service ecosystems (mobility, home, care, ...)
- Less risks due to less accidents, unclarity about liability and responsibility
- Future IT infrastructure

Relevant Eurapco and Partner activity

**New
technology
reduces
need for
insurance?**



Opportunities

- New risks to insure
- New business models
- Usage based insurance

Challenges

- Less risks due to less accidents
- Liability & responsibility in case of an accident



Motor Liability

Who is Liable?

WHO CAN BE HELD LIABLE?

The vehicle manufacturer is obliged to deliver a product that is fully tested in all situations and under all circumstances.



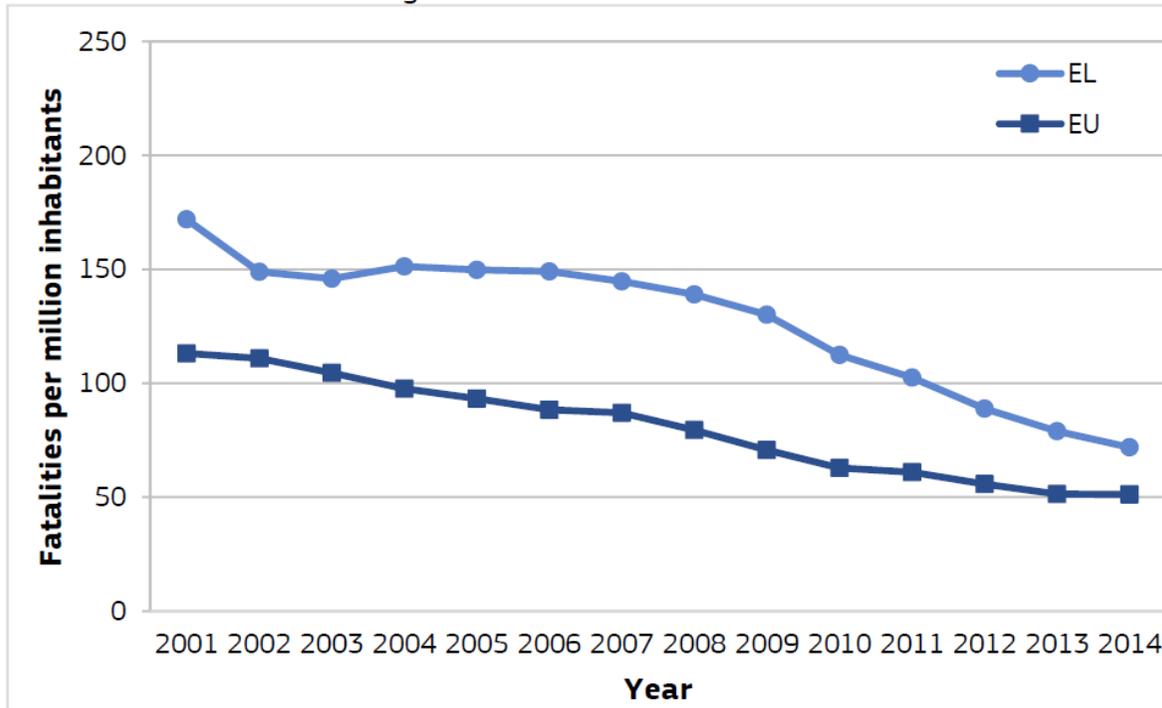
- More parties involved
- All with their own responsibilities
- “Combination of events”
- Society view

Liability stays with the driver under the current regulatory framework as far as the driver retains the control of the vehicle

Motor Liability

Accidents decreasing pattern is expected to further continue....

Figure 2: Development of fatalities per million inhabitants between 2001 and 2014 for Greece and the EU average



Source: Eurostat

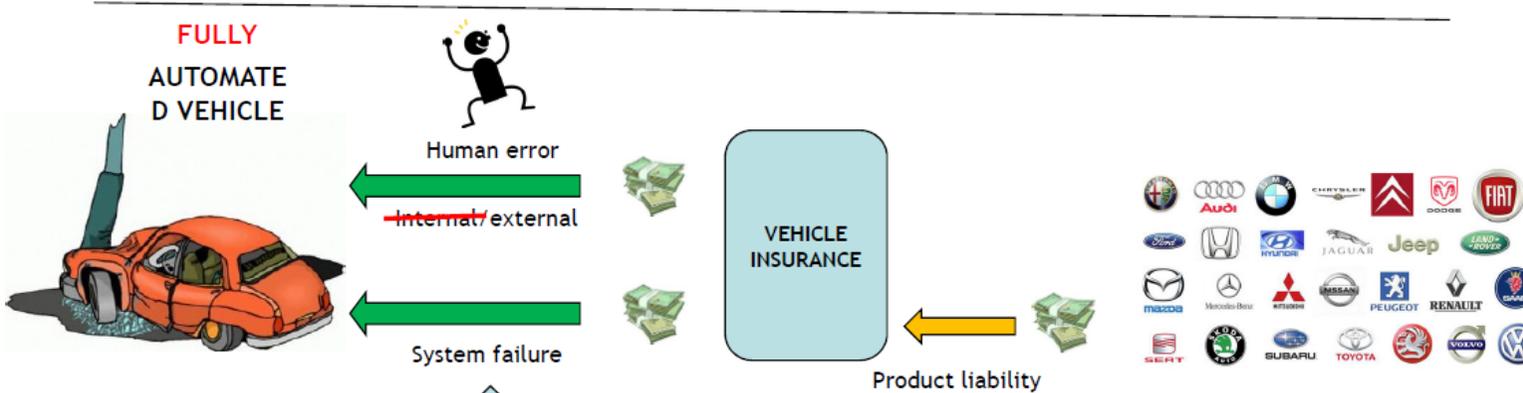
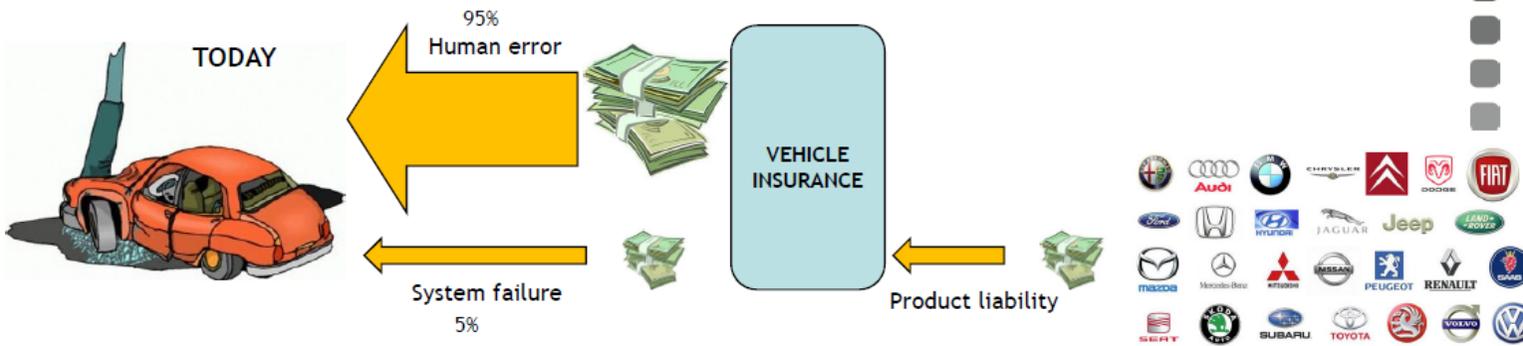
Claims Reduction	2020	2025	2030	2040
Assisted driving		✓	✓	
Collision prevention		✓	✓	
Self Driving Cars			✓	✓
Overall Reduction		>30?	>50?	>70?

Premium reduction will follow the same trend?

Possible scenarios: advantage for drivers



- Vehicle manufacturers already at risk
- The assumption that “every accident of a high automated car is a case of product liability” is wrong



Standards, validation, certification

Coping with complexity of automated road transport



Product Liability

Cars manufacturers view?



Comics Source: Contingencies, American
academy of actuaries, 03-2015

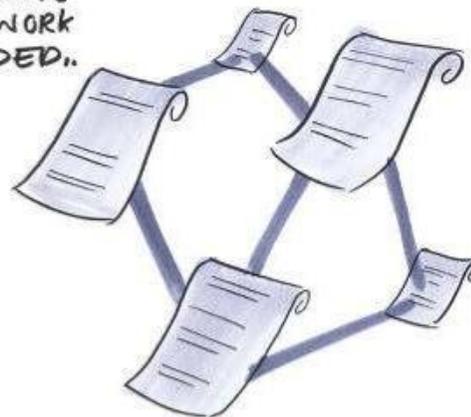
- Musk(Tesla) makes it crystal-clear that his company **will not bear responsibility when the autopilot car crashes**
- Volvo has a quite clear position. ***“if the car is in autonomous mode and causes a crash”, Eugensson said Volvo will take responsibility. It will be difficult to sell if the driver is still liable. It gives a false promise”***

Product Liability

Part of liability is transferred to OEM suppliers ?

OEM's WILL NOT TAKE ON LIABILITY
DUE TO PERCEIVED HIGH FINANCIAL RISKS

LEGISLATIVE
FRAMEWORK
IS NEEDED..



I'M NOT GOING
TO PUT THAT ON...



..ON E.U.
LEVEL
OR GLOBAL
LEVEL



- Need of adequate information on the appropriate use of any automated driving features
- "I accept" the use...
- "Warranty" liability

Data ownership & privacy are related issues

- Modern vehicles have already increasing levels of communications abilities built into them. Some have embedded SIM cards, whilst others have the ability to link up with the occupant's mobile phone
- Above described approaches can also enable connection with the Internet. This offers many opportunities for transmission of useful data to and from the vehicle
- Numerous stakeholders commented on the high value of data that would be gathered by in-vehicle communications platforms about both the vehicle itself and its driver
- For example, **insurance companies would be interested in individual driving habits and retailers would be very interested in attracting drivers to their locations**



- Volvo's plan is to have two data sets, one for autonomous driving and one for manual driving
- Data sets for manual execution will be managed as today's cars
- Volvo's assessment and surveys show that **the customer can accept a higher degree of data and monitoring when the vehicle is running itself than the vehicle is driven manually**



Increased Vulnerability to cyber attacks...



- Introduction of greater connectivity in to vehicles will arise numerous security threats
- Unauthorized parties, hackers, or even terrorists could capture data, alter records, attacks on systems, compromise driver privacy by tracking individual vehicles, or residences

Is this possible?

Published Research proves that this is possible...

If an attacker can send Controller Area Network (CAN) packets, these might affect the safety of the vehicle,

“This paper has shown, for two different automobiles, some physical changes to the function of the automobile, including safety implications”

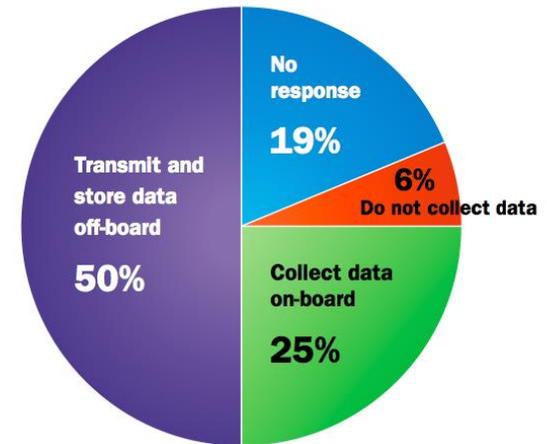


Cyber Risk

Report by Senator Ed Markey in US stress the risks related to security & privacy...

- Nearly 100% of cars on the market include wireless technologies
- Most manufacturers were unaware of or unable to report on past hacking incidents
- Security measures are inconsistent and haphazard
- Automakers offer technologies that collect and wirelessly transmit driving history data
- Customers are often not explicitly made aware of data collection

PERCENTAGE OF AUTOMOBILE MANUFACTURERS THAT COLLECT AND TRANSMIT DRIVING HISTORY DATA



Is Insurance the solution?



- Trikala is one of the city candidates participated in CityMobil2 project
- 2014 Greek Parliament accepted regulation for research purposes under pilot allowing bus urban releases circulating on road without presence of a driver on board
- 60% of the route in central urban roads at city center and 8 stops in place
- **Anytime, direct brand of Interamerican, insured buses for MTPL & Road Assistance**



VEHICLE INSURANCE POLICY & PREMIUM PAYMENT RECEIPT

General information	
Policy No:	30471692
Date of Issue:	23/09/2015
Inception Date:	23/09/2015 12:00 μ.μ.
Expiration Date:	23/03/2015 12:00 μ.μ.
Intermediary's Code:	I340102

E-TRIKALA S.A.
44 STRATIGOY SARAFI STR.
42100 TRIKALA, GREECE

Policyholder (Contracting Party) Details	
Name:	E-TRIKALA S.A.
Surname:	E-TRIKALA S.A.
Tax Reg. No:	998212331

Vehicle Details	
Vehicle No:	TKT3134
Use:	SPECIAL TYPE
Make:	ROBOSOFT
Model:	ROBOSOFT
Date of 1st vehicle permit:	23/09/2015
Cubic Centimeters:	
Taxable Horsepower:	2
Insured value:	0.00

Coverages	Liability limits (€)	Deductions (€)
BODILY INJURY PER PERSON	1,000,000	
PROPERTY DAMAGE PER ACCIDENT	1,000,000	
PROPERTY DAMAGE FROM UNINSURED VEHICLE	EFFECTIVE	
VEHICLE & DRIVER'S LEGAL PROTECTION	EFFECTIVE	
ROAD ASSISTANCE (TEL.: 1158)	EFFECTIVE	

The Policyholder (Contracting party) was informed about the General & Special Terms provided in the Book of Insurance Conditions (05/2014) received along with the insurance policy. Information about the Policyholder's right to object is set out in paragraph 3, on the reverse of this certificate.

Important information

The insured vehicle is an urban bus of "special use" with predetermined route on the road, in the city of Trikala, operating without the physical presence of a driver, for research purposes, pursuant to L.4313/14. The officer responsible for monitoring Bus driving movement from the Control Center is considered as the vehicle operator and must be holder of a valid driving license of equivalent class and shall be held liable under the provisions of L.2696/1999, as the vehicle driver, for immobilizing the vehicle, if required by traffic or emergency conditions

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“Driving from distance” concept



Thank you!



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