

# Injury Schemes Seminar

**Balancing Outcomes**

10-12 November 2013  
Sheraton Mirage Gold Coast



# Observations on European Motor Bodily Injury insurance

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# Agenda

- 1 Large motor bodily injury events in Europe
- 2 Motor bodily injury compensation in selected countries
- 3 'Risk of Change' in European Motor insurance

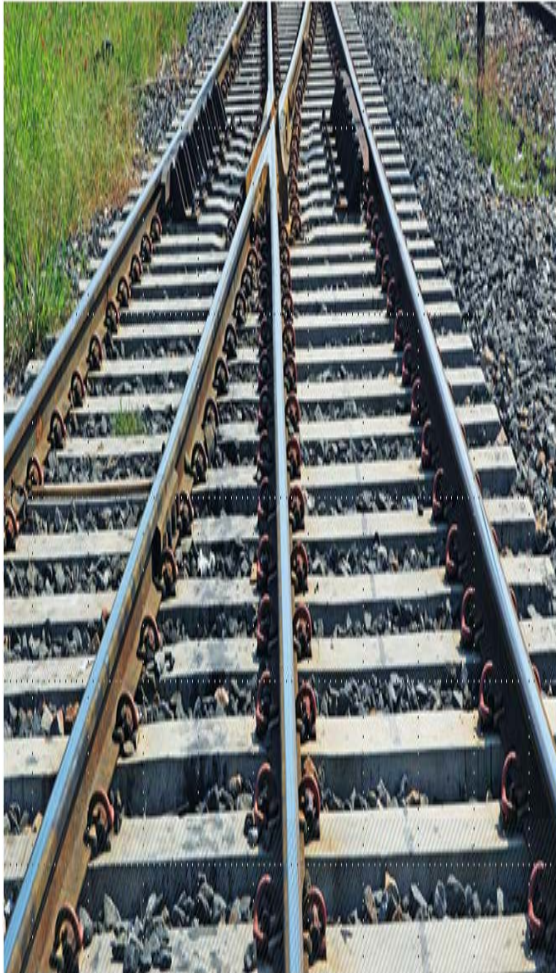


# Large motor bodily injury events in Europe





## Motor vehicles and trains



Selby rail crash, UK (28th Feb. 2001)

10 Dead, 94 Injured

€28million in Bodily Injury loss

TGV Collision, France (12th October 2011)

2 Dead, 48 Injured

€27million in Bodily Injury loss



## Motor vehicles in tunnels



**Tauern Tunnel, Austria (29th May 1999)**

**12 Dead, 42 Injured**

**€28million** in Bodily Injury loss

**Mont Blanc, France (24th March 1999)**

**39 Dead**

**€30million** in Bodily Injury loss



## Other losses involving vehicles



Los Alfaques, Spain (11th July 1978)

140+ Dead, 500+ Injured

€140million in Bodily Injury loss



## Summary of large BI events

Loss	Categories	Country	Date of loss	Loss amount (€m)	Bodily Injury component (€m)
Los Alfaques, Tarragona	Dangerous goods	Spain	1978	€140	€140
Mont Blanc Tunnel	Tunnel	Belgium	1999	€422	€30
Selby Rail	Vehicle/train	UK	2001	€60	€28
Collision entre un TER (Saint-Médard-sur-Ille)	Vehicle/train	France	2011	€35	€27
Peter Pam	Others	Italy	2006	€18	€18
Basler "Vienne"	Others	Switzerland	1996	€16	€16
Busunfall in Lyon	Others	France	2003	€10	€10
Verkehrsunfall in Berlin	Others	Germany	2010	€9	€8
Groupama	Vehicle/train	France	2009	€13	€7
Collision TGV (Évian-les-Bains)	Vehicle/train	France	2008	€13	€7

All losses shown in 2012 terms



# Motor bodily injury compensation in selected countries







# Basic models for severely injured

## Models

## Implication

Insurer bears all  
risks / cost



- Recourse by Social system.
- MTPL claim reflect care cost inflation

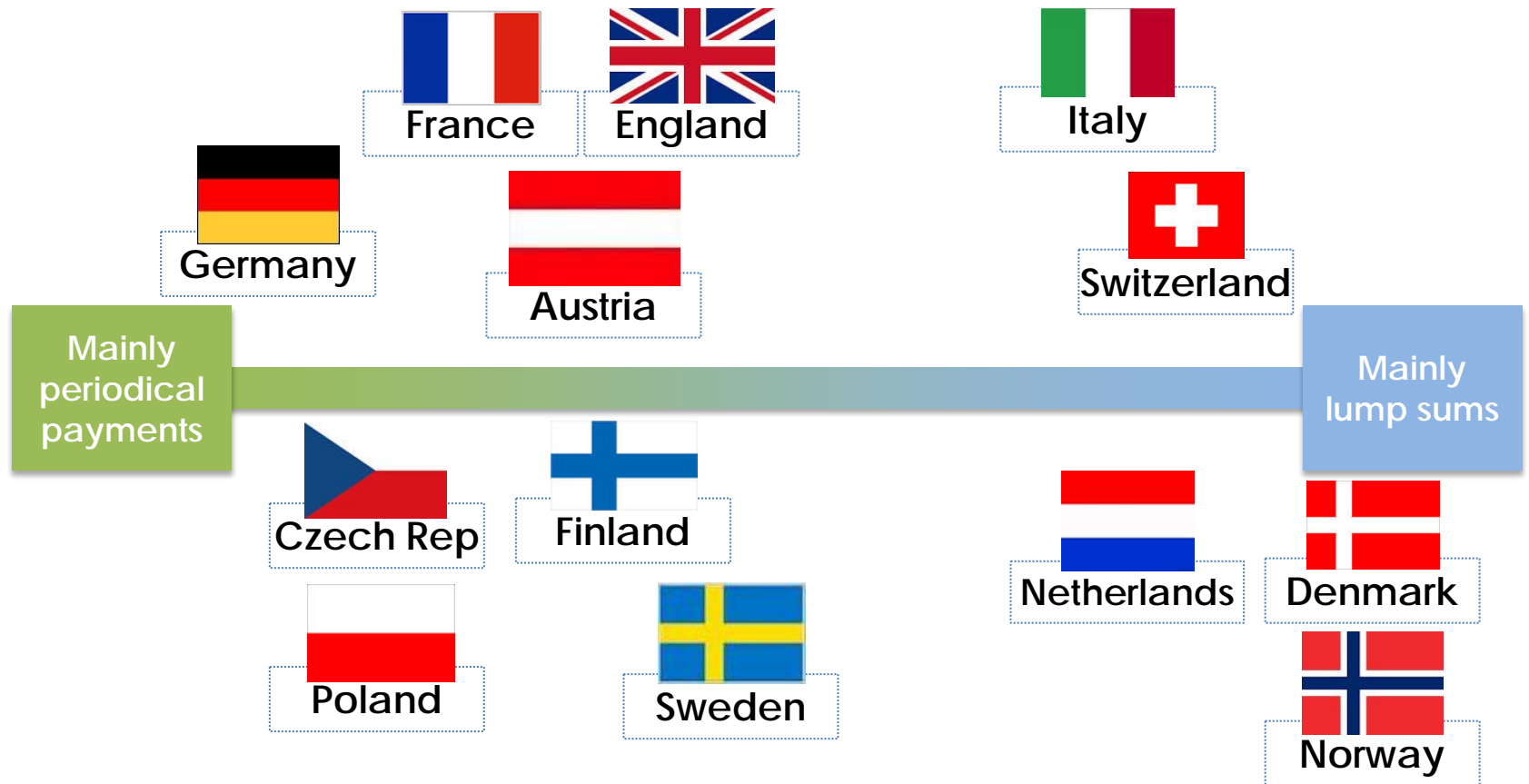
State  
involvement



- National BI schemes
- Potential change of social system

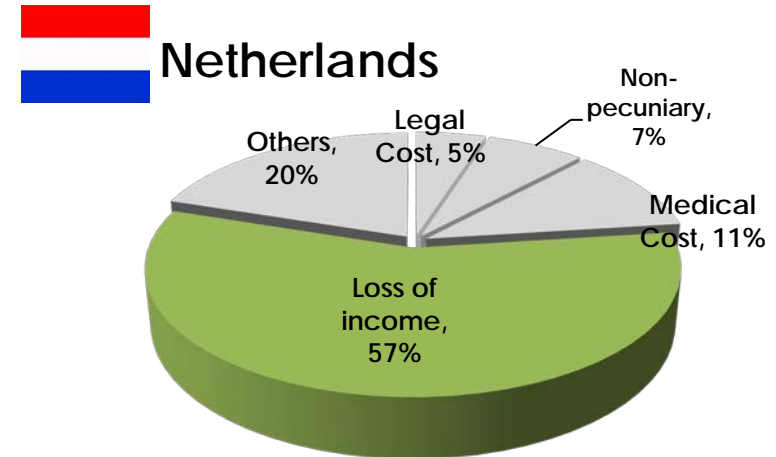
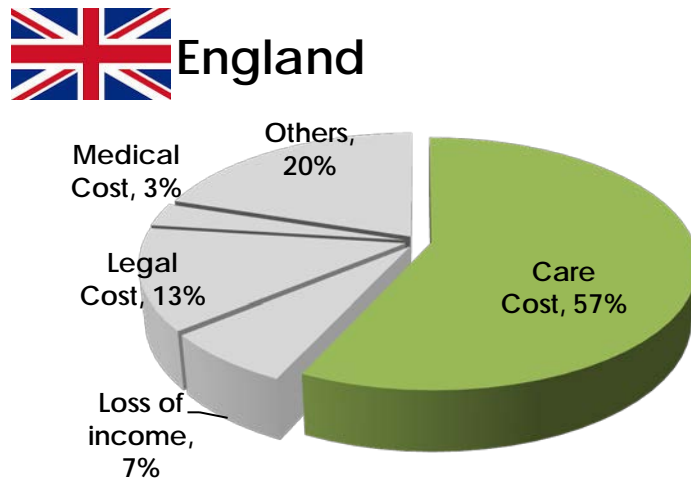
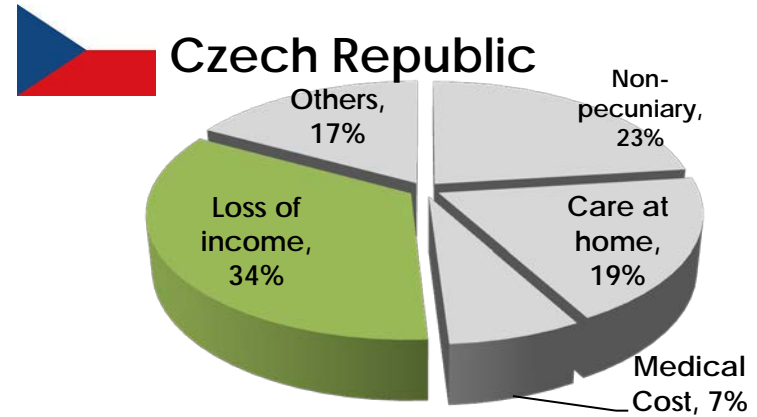
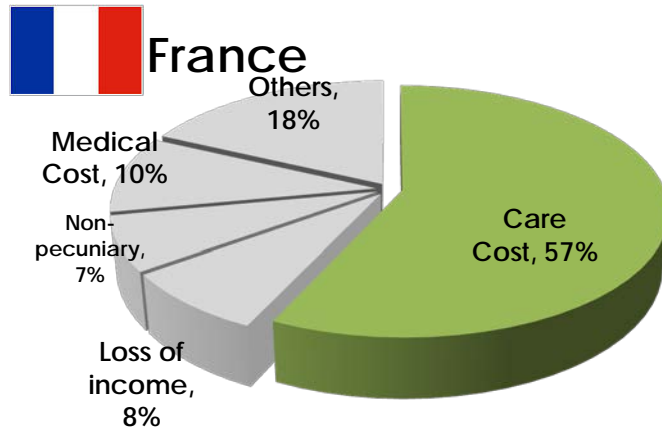


# Periodical payments vs lump sums





# Major heads of damages

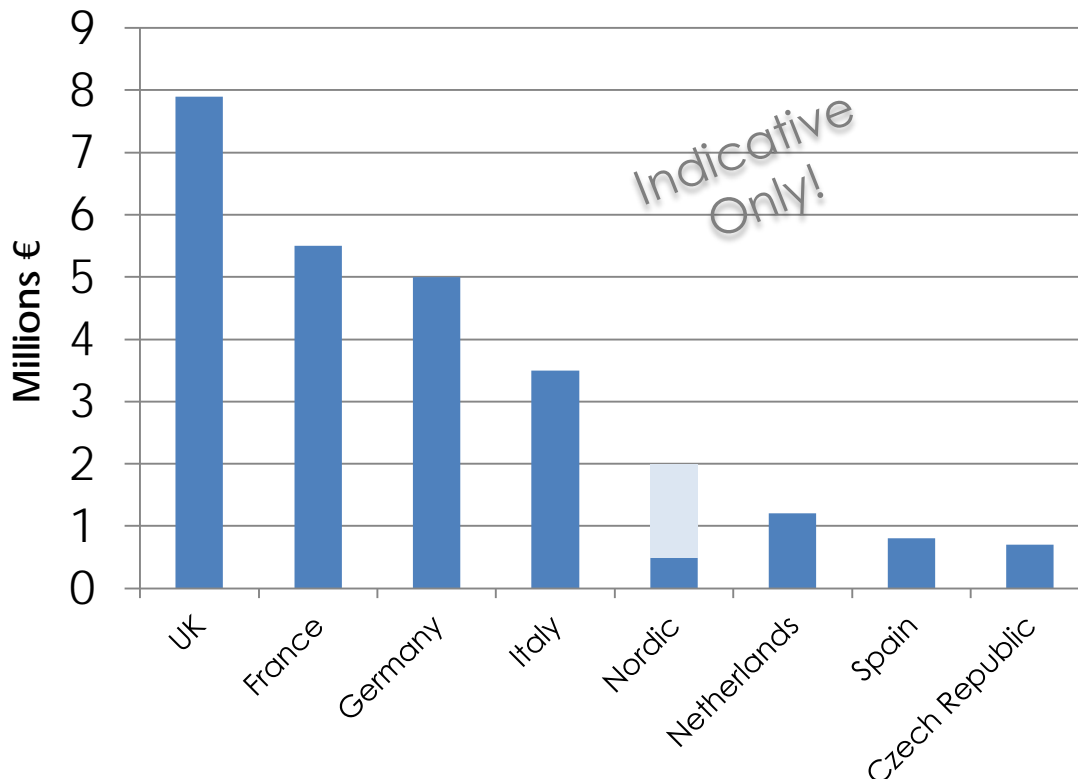




# Comparative claim amounts

## Average bodily injury claim settlement:

Example: 30 year old male victim, severe brain damage after road accident, permanent disability, married, no children, annual net income € 60,000



- UK, Germany, France longer run-off periods and higher cost of care
- Netherland, Nordic countries costs partly met by social insurers
- Eastern Europe: Non-pecuniary damage.



## Outlook for specific schemes

Germany  
UK  
France

- Superimposed inflation
- Pressure on discount rates

Central & Eastern  
Europe

- East / West adjustment
- Green Card Claims

Nordic  
Netherlands

- Social insurance / municipalities

Spain  
Italy  
Belgium

- Benefit increase

- Demographic trends
- Harmonisation of Law
- Social security recourse
- More annuities



## 'Risk of Change' in European motor insurance





# Risk of change in bodily injury losses

Change in  
law / legal  
environment

Social  
security

Medical  
progress

Discount  
rates

Victim /  
consumer  
protection

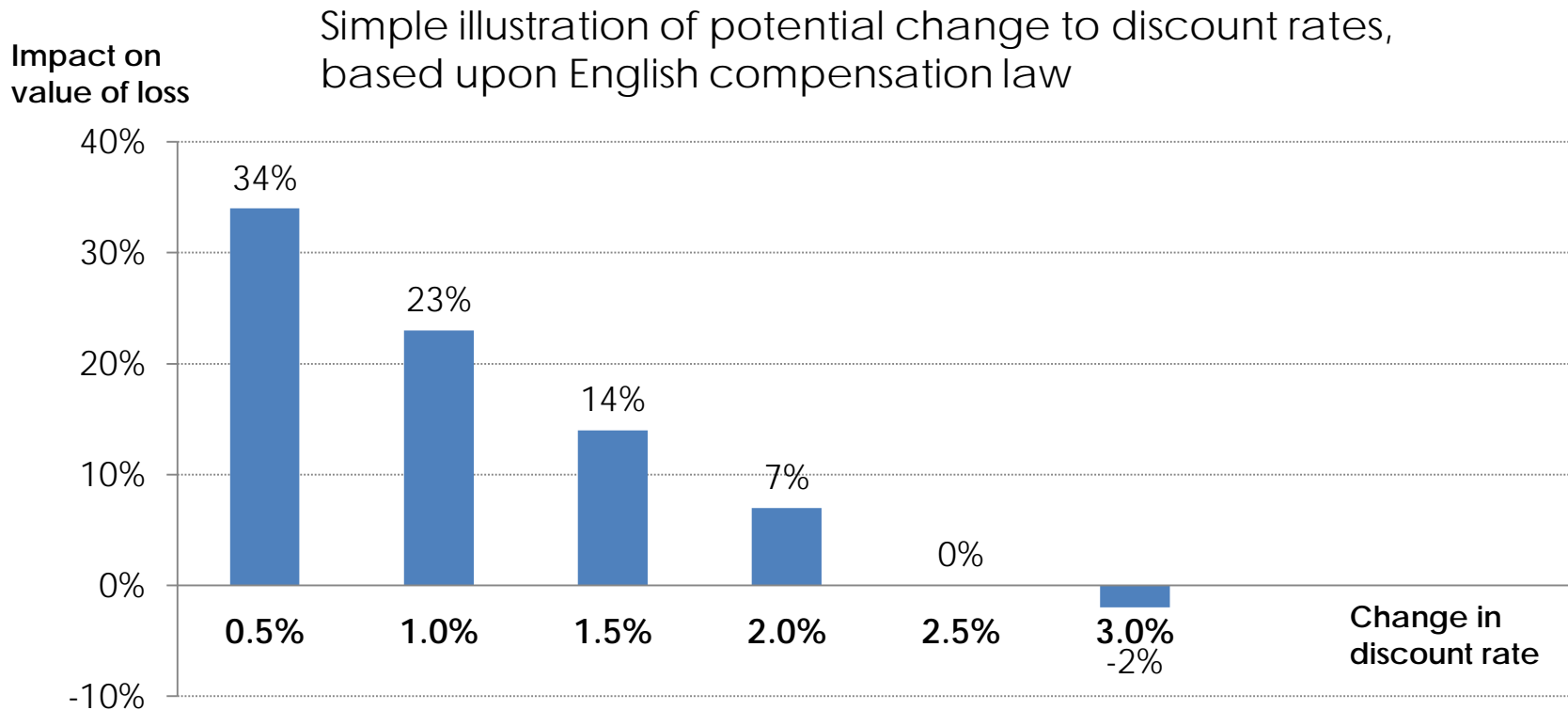
Demographi  
c trends

Retroactive  
changes

Technology  
progress



# Risk of change from discount rates







## Discount rates across Europe

Country	Current rate	Outlook
England	2.5%	In discussion
France	~2%	Yearly change
Netherlands	6%	Stable
Sweden	3.5%	Fixed
Switzerland	3.5%	Stable
Spain	~3.5%	Related to CPI
Germany	2.25%	Reduced in 2012



## Risk of change from cost of care

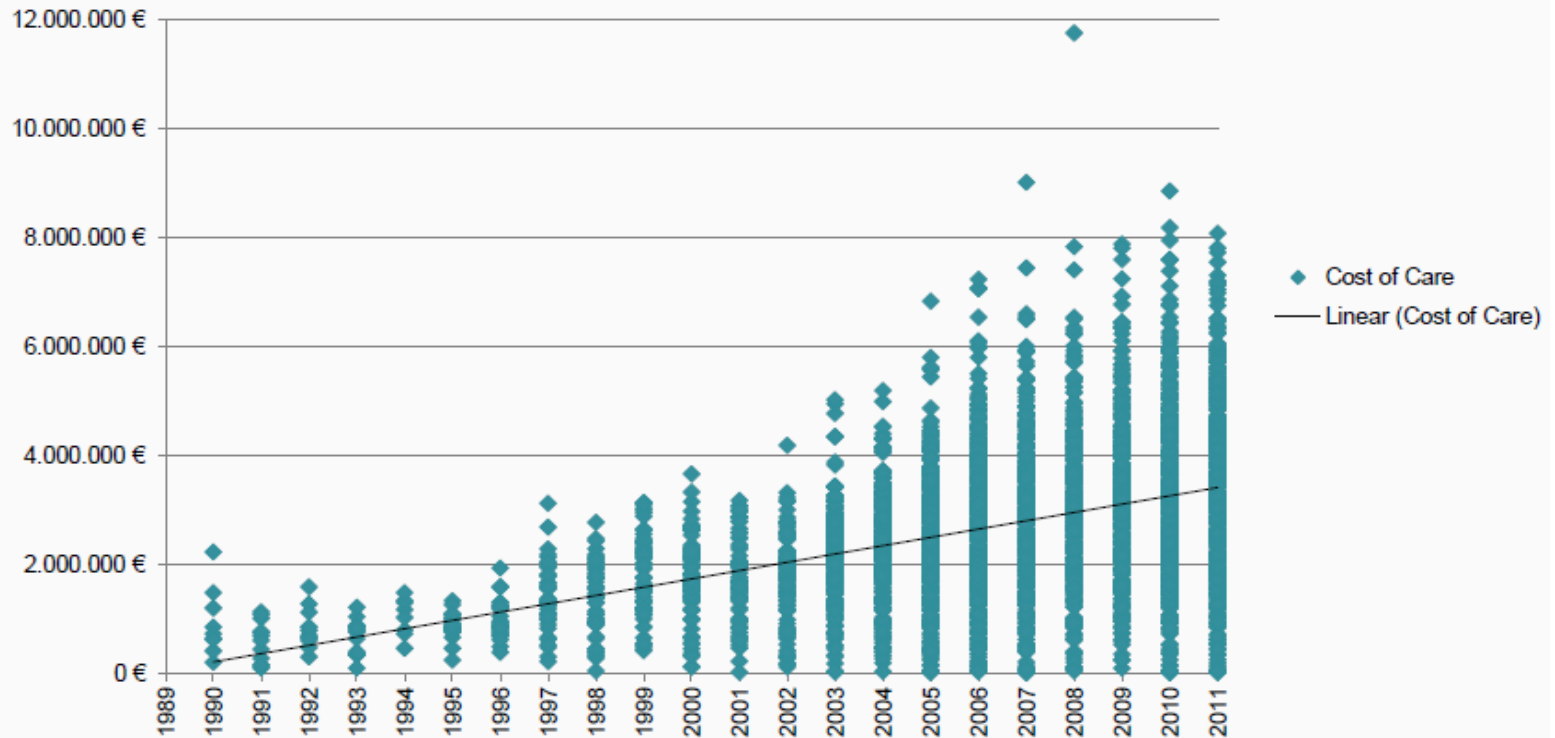
- A four-year-old boy was a passenger in a vehicle. Another driver lost control of his car and collided with the first vehicle. The boy sustained severe brain damage, 100% disability
- Reinsurer informed **1999**, initial estimate **€4.8m**
- **As at 2010**, payments and outstanding **€11.2m**

What happened?



# Risk of change – cost of care in France

Development of care costs 1990-2011



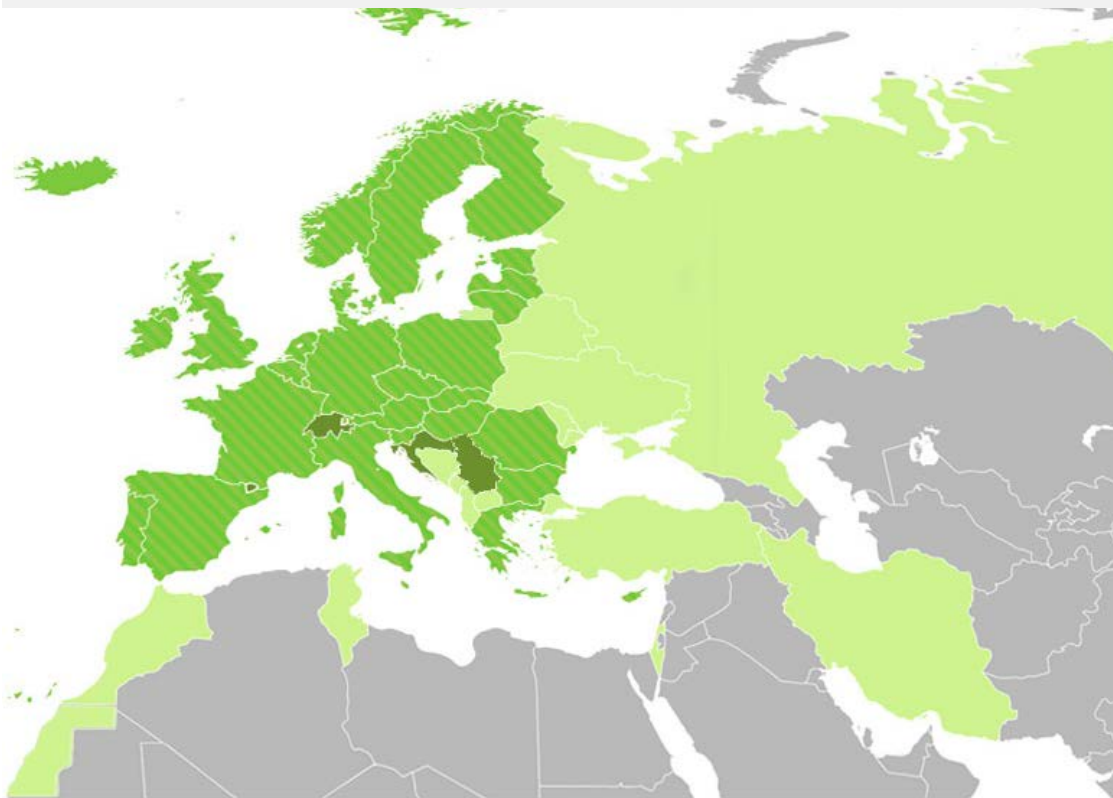


## Impact of cost of care changes

Year	Loss € M	Reason for change
1999	4.8	First calculation of reserve
2000	4.6	24 hour care @ <b>€10.50</b> / hour
2001	4.6	Maintain reserve: boy stays in a nursing home
2002	4.7	Small payment, keeping same reserve
2004	4.9	Incr future medical & loss of income; care at home
2006	7.6	<b>Discount factor reduced</b> to 2.01% (from 3.1%)
2007	10.1	New care concept set up: <b>€15-24</b> / hr
2010	11.2	Deterioration of condition

## Risk of change – Green Card

### Green Card Exposure Map in Europe



### Loss Example:

Accident in Germany:  
Male, born 1971,  
severe brain injury

Green Card claim is reserved at **€ 4 m** FGU

Hypothetical costs for a similar domestic case in Lithuania: **€ 0.5m**





## In summary

Motor bodily injury losses can result from catastrophic motor accidents, where the majority of cost is in property damage

The outlook for various European motor bodily injury schemes characterised by:

- Demographic trends
- Harmonisation of Law
- Social security recourse
- Trending towards more annuities

Reinsurers are subject to 'Risk of Change' - loss increases from exogeneous factors eg discount rate changes, and retrospective amendments



# Thank you!

