



Insurance Bureau of Canada  
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# Automated Vehicles: Potential Insurance Implications

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- Automated vehicle technology is on the verge of maturity.
- Technology moves fast; can insurance follow the changing needs?
- What about the regulatory environment? Licensing, mandatory insurance?
- There are potential insurance implications. But before we discuss, we need to understand a few concepts....

# Types of Insurance



- Personal
  - Automobile
  - Home/residential
- Commercial Insurance (non-standard)
  - Commercial vehicle fleets
  - Businesses, buildings, machinery, production interruptions, product liability etc.
- Reinsurance
- Global risk transfer for personal and commercial lines
- Surety bonds
- Linked to product liability, performance

Image Source: <http://www.uhlagency.com/news/5-reasons-to-use-an-independent-insurance-agent>, [captive-agents-vs-independent-agents-300x232.jpg](http://www.uhlagency.com/wp-content/uploads/2013/03/captive-agents-vs-independent-agents-300x232.jpg), <http://www.uhlagency.com/wp-content/uploads/2013/03/captive-agents-vs-independent-agents-300x232.jpg>, April 30, 2014

- Self-insurance
  - Large businesses/organizations
  - Governments
- Primary insurers (private or public)
- National
- Reinsurers
  - National
  - Global



# Automobile Insurance

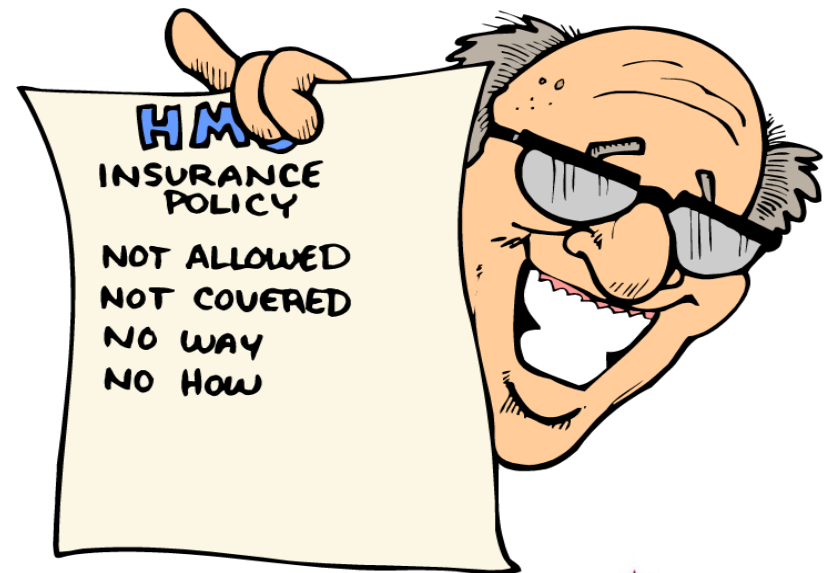
- First party
  - Damages to your vehicle
  - Own injuries
- Third party (except in no-fault systems)
  - Damages to other vehicle(s)
  - Bodily injuries to others
  - Punitive damages
- No-fault system
  - Each party responsible for own damages
  - Cannot sue for punitive damages beyond compensation scale





# Business as Usual for Insurers?

- Still speculating, no clear direction yet
- Have to go by insurance principles
- Industry responds to needs
- Impacts potentially will be felt at different stages of technology implementation
  - Development
  - Introduction
  - Maturity







# Liability Chain

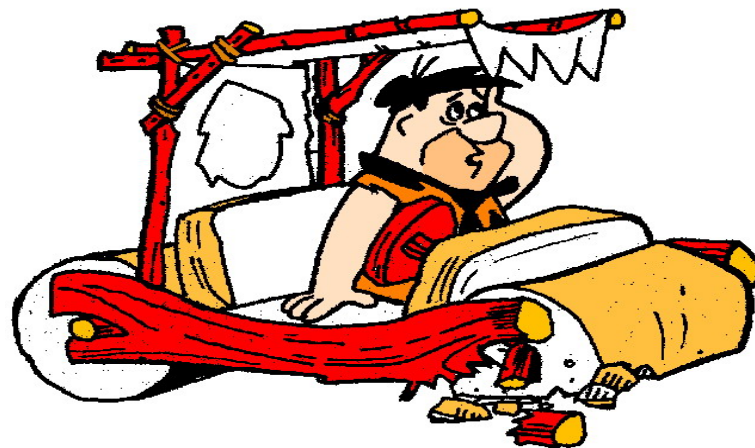
- Who is responsible if something goes wrong?
  - Currently, the driver of a vehicle is responsible for being in control of the motor vehicle.
  - But ... at level 4 and certainly at level 5 of autonomy, the driver is no longer a driver. He or she has surrendered this function to the machine.





# Development Phase

- Not just an enhancement of existing technology
  - Requires extensive testing in a real driving environment.
  - Insurance is critical for “real life” testing.
- Basic insurance coverage is required, but is there a need to go further?
- Self-insurance is an option – usually large corporations will seek performance bonds or excess coverage, beyond the self-insurance limits.
- There will be a need for product liability for software developers, sensor suite manufacturers, and interactions between sensors and vehicle.



# Introduction Phase

- Automobile insurance will still be necessary due to coexistence of driverless and human driven cars
- Insurance industry will need to have good data for pricing.
  - Need to use collision stats during testing/development phase



- With time, the cost structure of automobile insurance will be affected.
- We can expect physical damages to vehicles: theft, vandalism.
- Bodily injuries, both minor and catastrophic impairment, will be reduced.



- Individual transportation providers might go beyond the auto manufacturers.
- Business models will affect insurance requirements.



# Changes in Types of Risks

- Hacking/terrorism
- Data breaches
- Inappropriate response routine by program causing crash
- Technologies coexisting





- This new technology will bring challenges.
- Insurance industry is adaptive.
- Cooperation and constant dialogue among all stakeholders will ensure success.
- You can expect insurers to support car or transportation pod owners and businesses meet their insurance needs of the future.





Thank you!

# Questions ?

