

Independent and Transparent Accident Investigation Recommendations A point of view from the industry

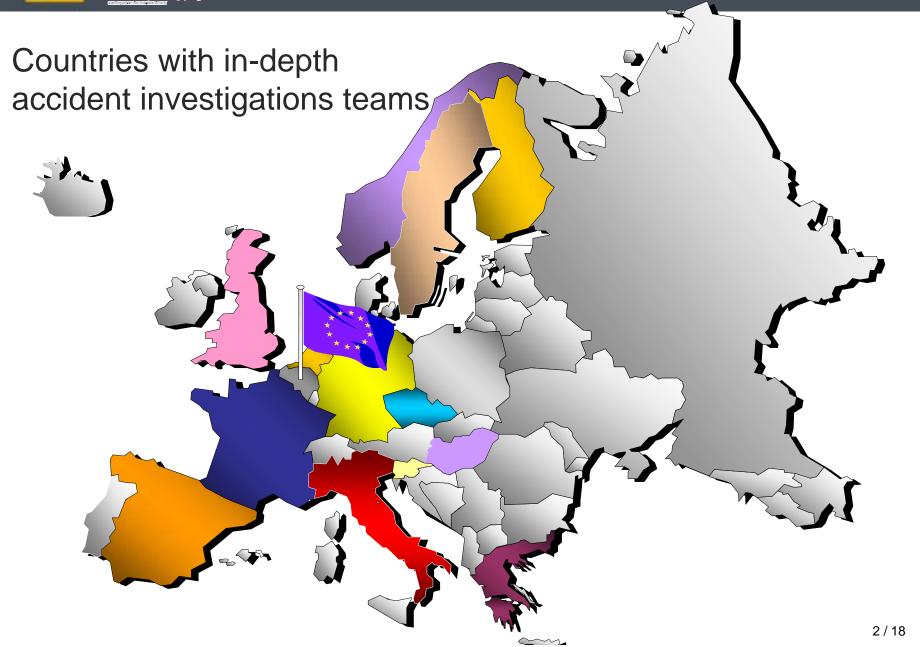
Yves Page

Laboratoire d'Accidentologie, de Biomecanique et d'Etudes du Comportement Humain PSA RENAULT, France

March 2007

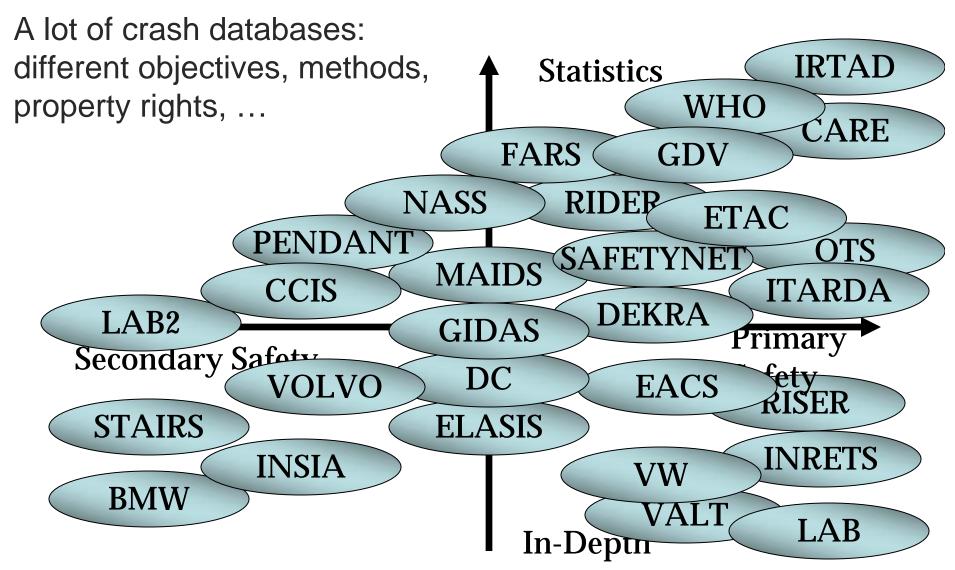


The situation











What are the needs?

A diagnosis of the road safety issues

 From the diagnosis to the identification of the most promising safety actions

 Evaluation of the real world safety benefits of these prevention strategies



What are the Promises?

- Accident data that are relevant, pertinent, representative, clear, accurate, understandable, and usable ...for analysis
- Accident data that are considered of high quality by the scientific community and the stakeholders and not only by the data owners
- Accident data that are addressing the good issues (avoid the data cimetery)



What does *Investigation* mean ? (Restricted definition)

- Technical crash investigations and not police or forensic investigations
- In-depth investigations and not police reports examination or international national or local crash census
- Any kind of in-depth investigations including prospective and retrospective studies



Accident data

Injury accidents census 1993 – 2007.

Fatal Crashes (2003)

International Databases
(GIDAS- CCIS – IRTAD – EACS)

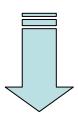


In-depth crash investigations oriented towards secondary safety
(1970 - 2007).

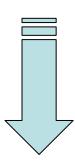
In-depth crash investigations oriented towards primary safety
(1970 - 2007).



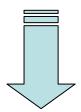
What do we do at LAB?



Accident Mechanisms



Injury Mechanisms



Evaluation of the effectiveness of technologies



The same crash 20 years later









A few results



Frontal airbags reduce severe head injuries by 90%



Car struture : reduction by 50 % of fatality rate

ESC: -15 % injury accidents



Load limitor reduce the torso severe injuries by 80 %



Double pretension reduce severe abdomen injuries by 70 %

Brake assist: -11 % injury accidents



A few results

Well, we do not have a clue about the effectiveness of this airbag



The *Independence* issue

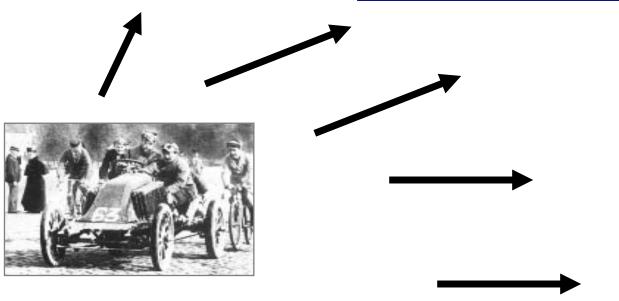
- What is independence?
 Do we implicitly question transparency, honesty and credibility?
- Pure independence is 'fiction'
- Is independence really necessary?
- Could independent investigations cover all issues and all needs?
- Is independence compatible with Respect of private life?
- Is it cost-efficient?



The *Manufacturer* issue

Objective: Conceive, Product and sell vehicles







The Manufacturer issue

- The car industry invests money in the crash investigations...
- ... to identify promising safety solutions,
- ... to prepare and comply with regulations,
- ...and to help determining relevant car safety test procedures and ratings



The Manufacturer issue

- Holding crash data is a competitive advantage
- Partnership is also an advantage (CCIS, GIDAS and French exemples / European Projects)
- Closeness to the product (Vehicle)
- Need for a balance between economics and citizenship (a safe car becomes safe when it is sold and driven on the road)



Can we work together?

- Can we think we couldn't?
- We are already working together even though the objectives are different
- One principle: those who are investing in research should first get the fruits of the investment
- ... On the other hand, safety is like justice, for all...



Discussion: Come together

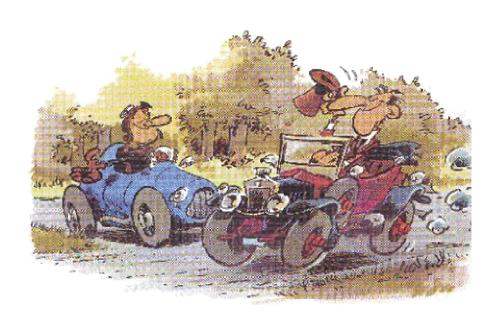
- Common investigations are already currently conducted (GIDAS, CCIS, SIRA, PENDANT, SAFETYNET)
- Recommended Common tools are already availabe, to some extent (ISO, SC12 – WG 7 Accidentology, OECD)
- Objectives of such investigations are not necessarily similar for all and claim for several several types of investigations
- Consequently, I wonder whether a common body in charge of accident investigations is the unique efficient way
- Moreover, there are a lof of bodies willing to monitor their own investigations.



Discussion: Come together

- Crash investigations are very costly and must be optimised to get European, National and Local insights into traffic safety issues. This claims for a complex quasi experimental design for investigations.
- Independence is not the crucial issue by now. Non relevant, inaccurate, incomplete, missing data, and other data than accident ones is the main issue.
- Crash data is not the only kind of data for which the independency is an issue
- Next issue is the independence of the analysis made upon the independent data





Thank you all for your attention