

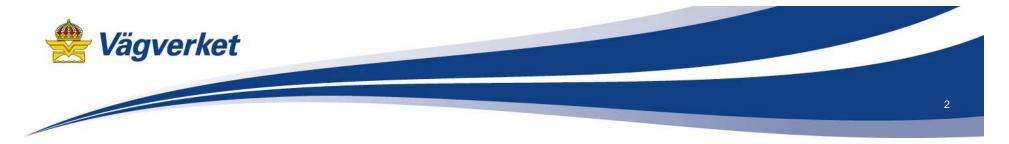
"The Evolution of Automobile Safety from Experimental to Enhanced Safety Vehicles: A Look at Over 30 Years of Progress"

Prof.* Claes Tingvall, Director of Traffic Safety at the Swedish Road Administration and Chairman of Euro NCAP

Monday 6 June 2005

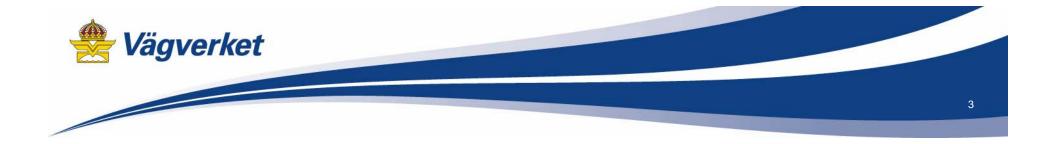
Washington D.C.

* Monash University Accident Research Centre Presentation prepared in cooperation with Anders Lie, SRA



30 years of development

- Ten times more likely to be killed in a 30 y old car in a crash with a new car
- Vehicle safety is a major contributor to safety overall and political targets for safety
- Development of vehicle safety is faster than ever net effect approximately 40-50%



"Safety does not sell" is no longer true

- ESC increase from 15 to 69% in 20 months
- SBR increase from 0 to 60% in 30 months
- 35% of new car sales are Euro NCAP 5 stars



"Industry does not deliver until they are forced by regulation" is no longer true, at least not generally

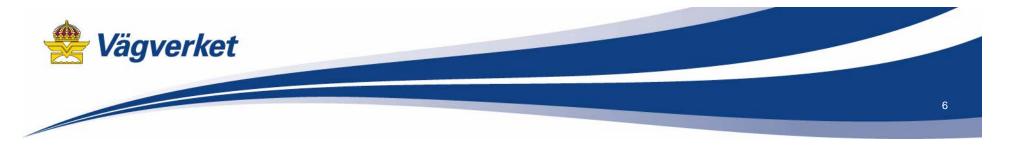
- Most new systems are not regulated
- Most manufacturers have internal targets beyond regulated level
- Automotive industry has research and development capacity beyond society
- Some aspects, like pedestrian protection, not so fast



Competition and customer satisfaction are drivers for development – regulation is there for;

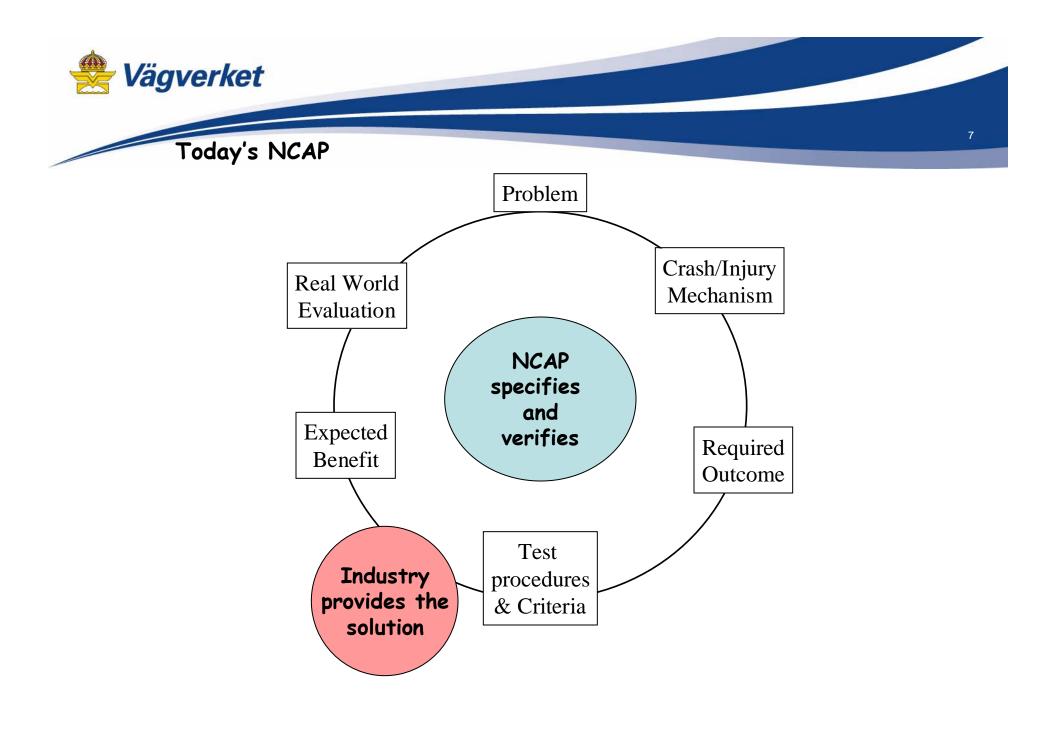
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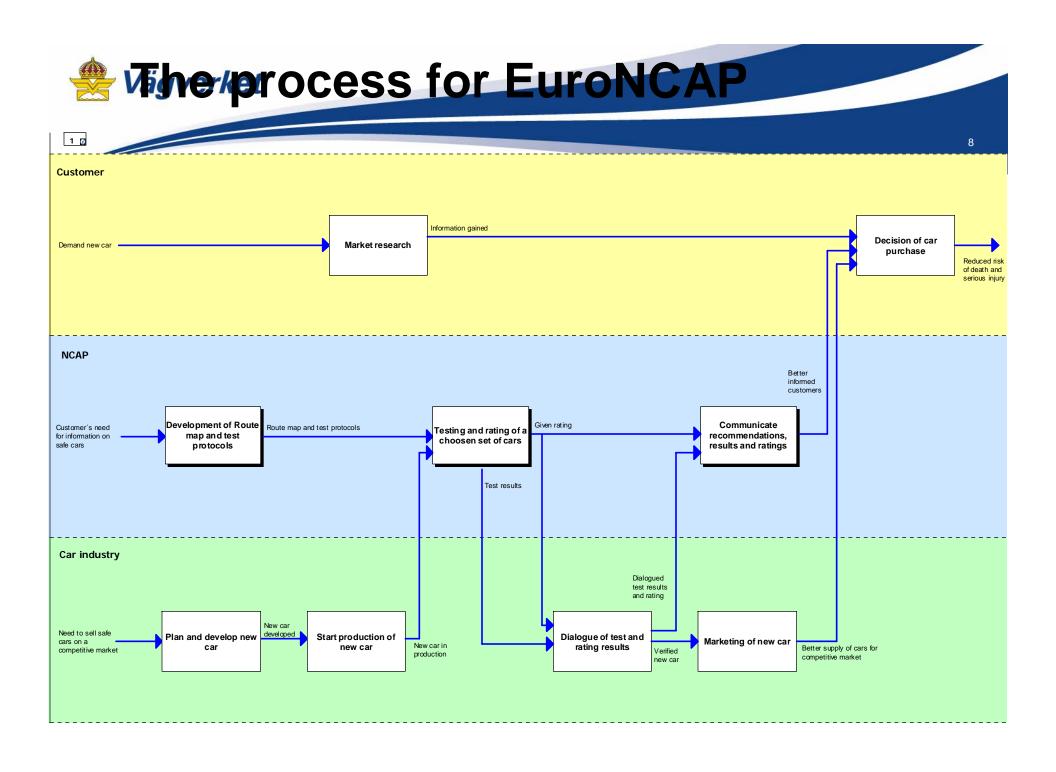
- Maintaining and increasing minimum level
- Cover areas with limited market forces
- Standardize and define aspects of safety

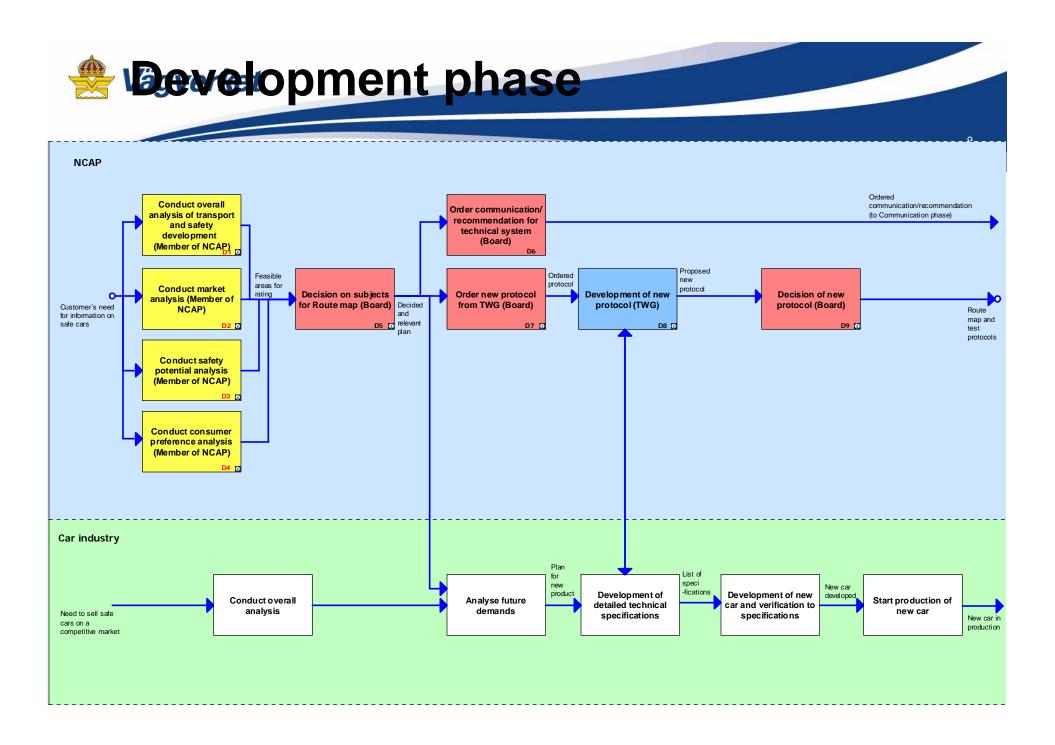


Which tools can the society use to enhance competition and demand?

- First of all, understand who is the customer of new cars (more CEO's than private)
- NCAP
- Act as customer and stimulate other fleet buyers, contractors, taxi and rental car companies
- Follow up new innovations and progress
- OHS regulations used for vehicle use
- Stimulate and fund research



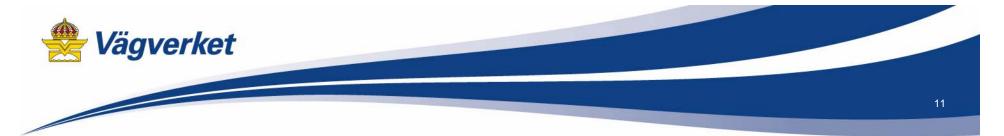


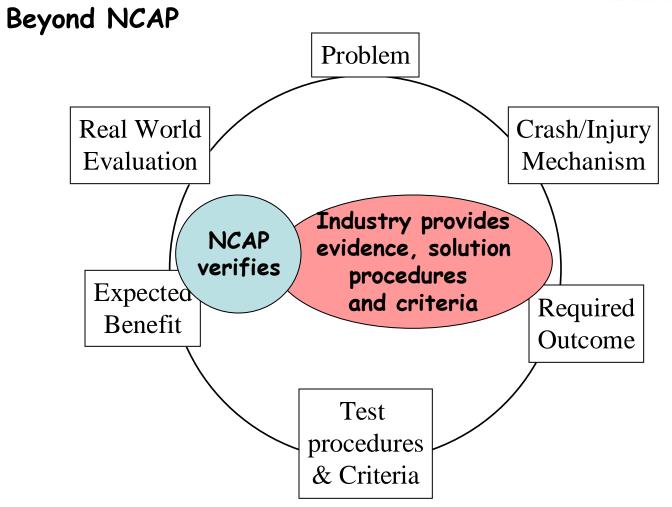


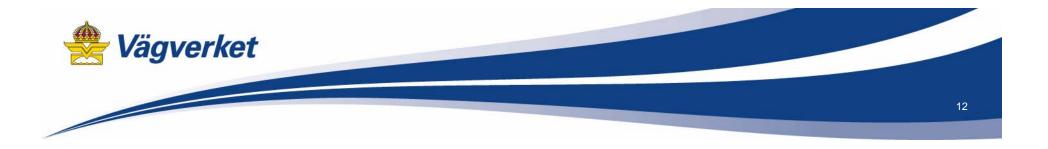


The NCAP process is effective, but is it too slow today?

- Does NCAP potentially slow down development and focus only on aspects giving credit?
- Are innovations so complex and integrated that they cannot be treated as stand-alone systems?







Summary

- Competition and customer satisfaction are the strong motivators for safety apart from regulation
- Society must develop more effective ways to drive development
- NCAP has been effective but must be developed further to stimulate innovation
- Industry should be stimulated to demonstrate by scientific methods the impact of innovations
- Customers are not individuals only, fleet buyers are in majority in many countries