The Future of Automotive Safety:
“Delivering a Safer Tomorrow Through Technology and Design”
Wednesday 14th May, 2008

Euro NCAP’s Push for Safer Cars

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Improving Vehicle Safety

- Legislation
  - Minimum standard
- Marketing advantage
- Avoid marketing disadvantage
- Product Liability
- Consumer Information
Euro NCAP’s Aims

- Reduce Road Accident Casualties
  - Consumer buying information
  - Incentive to manufacturers
  - Recognition of excellence
  - Empower safety engineers
Company Outline

- Formation in 1997
- Fully independent – Not for profit
- Backed by European governments, motoring, consumer and insurance organisations
Achievements

- Dialog with consumers through website and members’ media
- Push for safety beyond legal requirements
- “Best in class”
- Promote and reward safety innovation
Areas of Vehicle Improvement

- Poor Performing Bodysell
- Head Stability on Airbag
- Steering Wheel Contact
- Knee Impact Area Hazards
Areas of Vehicle Improvement

- Pole Crash Head Protection
- Pedestrian Friendly Bonnet
- Child Head Contact
- Partial Ejection Child
Effect on Vehicle Safety

Serious injury risk reduced by 12% for every star received (SRA, SARAC)

One Star Adult
Two Stars Adult
Three Stars Adult
Four Stars Adult
Five Stars Adult
Number of Cars
2008 Megatrends

Environment

Safety

Information

Affordable Cars
Holistic View on Safety

Safety landscape is changing rapidly…

New driver assistance technologies link HMI and active safety during normal driving state

Integral Safety technologies link active and passive safety

- Preventative
- Dynamic
- Avoidance
- Mitigation
- Impact
- Post-crash

Non-conflict, Conflict, Imminent-crash, Crash, Post-crash

Time
Focus increasingly from injury to collision mitigation

Market flooded with new adaptive safety assist systems

Accelerated market penetration in high income markets

Supplier driven: investment of more than 750 billion USD/year
Euro NCAP’s Challenges

- Top scores in adult occupant protection no exception
- Active or combined active/passive safety not rated
- How to keep consumers and manufacturers engaged?
Ambitions

- Upgrade assessment of vehicle’s secondary safety
- Promote “total” safety by introducing new Rating Scheme
- Award new emerging technologies as part of “Beyond NCAP”
Focus on Existing Protocols

- Pedestrian protection
  - Harmonisation with GTR test tools and/or criteria?

- Child Protection
  - Review of efficacy of current procedure

- Front and side impact protocols
  - Coordinate globally
“Whiplash” Protection

- Seat and head restraint performance in low speed rear impact – protocol v2.7
- Based on IWPG and SRA experience
  - 3 test speeds and 7 seat performance criteria
- Provisions for active and re-active head restraints
- First release by end of 2008
New Rating Scheme

- All-inclusive system: single 5-star rating
  - Integration of Whiplash, Speed Limiter and ESC assessment
- Simple message – User demand!
- Flexible - in terms of adding new protocols and shifting priorities
- Rewarding but challenging to industry
- Guided by real world evidence
Euro NCAP New Rating Scheme

1st Level of Consumer Information: Overall Rating

2nd Level of Consumer Information: Category Score
- Adult Protection Score
- Child Protection Score
- Pedestrian Protection Score
- Safety Assist Score

3rd Level of Consumer Information: Detailed Info
Beyond NCAP

- Addition to future’s assessment process
- Enable early assessment of new technologies proposed by manufacturers
- To accelerate the development and market introduction of life saving technologies on cars
Manufacturers can propose items for assessment

- Innovation
- Safety issue
- Accident mechanism and injury causation
- Target requirements
- Test procedures and criteria
- Expected benefit and side effects
- Real world evaluation
Evolution of Beyond NCAP

- Beyond NCAP introduction expected in 2009
- Euro NCAP will consider to turn “best practice” test methods into protocols
- Euro NCAP encourages the development of standardized test methodologies for intelligent safety systems
Conclusions

- Euro NCAP will focus on the contribution of passive and active safety systems in the safety rating.
- Single vehicle star rating will provide both opportunities and challenges to industry.
- Beyond NCAP will support the market introduction of life saving technologies on cars.
Thank you for your attention