Electric vehicles: Review of type-approval legislation and potential risks

Presented by Dinos Visvikis
Technical Lead – 13th January 2010
Objectives

- Provide recommendations on the completion of EC type-approval requirements for electric vehicles

- Assess potential risks associated with electric propulsion that are not covered by legislation

- Provide recommendations on appropriate legislative action if potential risks are identified.
Project overview

- Review of type-approval acts
- Evaluate safety risks of electric vehicles
- Review of international legislation

**Task 1 - Literature review**
- Legislation
- Industry standards
- Scientific literature

**Task 2 - Gathering information from stakeholders**
- Legislators
- Manufacturers
- Test houses
Review type-approval directives and regulations

- Examine whether the requirements are compatible with electric vehicles
  - Safety
  - Environmental performance

- Evaluate the safety risk of incompatible requirements

- Provide recommendations where amendments are necessary
Evaluate safety risks of electric vehicles

- Identify and evaluate potential risks not regulated in type-approval legislation
  - Battery risks
  - Vehicle handling and crashworthiness
  - Electromagnetic fields
  - Environmental risks
  - Low noise levels

- Provide recommendations on necessary legislative acts
Review legislation in other parts of the world

- Summarise legislation and standards in other regions (i.e. USA, Japan)

- Use the information as input to project tasks
Project timeline

- Project start: November 2009
- Interim report: February 2010
- Final report: June 2010
Thank you

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