(42nd GRPE, 29 May-1 June 2001, agenda item 8.)

## PROPOSAL OF MANDATE FOR AN AD HOC WORKING GROUP ON HYBRID VEHICLES (HEV'S)

## Transmitted by the expert from France

- 1. General definition of hybrid vehicles (HEV's)
  - Scope limited in a first step to M1 and N1 vehicles
- 2. Identification and definitions of categories of hybrid vehicles
  - Scope limited in a first step to vehicles fitted with electrical / thermal engines
- 3. Identification of the necessary amendments to existing ECE regulations, and framework (GR's)
- 4. Measurement of fuel consumption, electric energy consumption and the questions concerning CO<sub>2</sub> emissions.
- 5. Overview of the difficulties in measuring HEV's, for example :
  - ♥ Driver selectable modes
  - ☼ Distinction between charge-depleting and charge-sustaining HEV's
  - Regenerative braking on the roller bench
  - ♦ Four wheel drive vehicles
  - Pre-conditioning the battery
  - Effects regarding the durability of the battery, (energy losses ...)
- 6. Drafting of the Regulations.
- 7. Timetable
  - \$\text{\psi} 1^{st}\$ intermediate report on January 2002 : presentation to GRPE for agreement on definitions, categories of HEV's and priorities for ECE Regulations amendments.

  - Regulations amendments
  - \$\\$\\$\ final report to GRPE on January 2004