Economic Commission for Europe
Inland Transport Committee
Working Party on Transport Statistics

Sixty-second session
Geneva, 6–8 July 2011
Item 3 (g) of the provisional agenda
Methodological development and harmonization of transport statistics: Pilot questionnaire on road traffic performance

Definitions of vehicle energy types

Note by the secretariat

I. Mandate

1. At its sixty-first session, the Working Party invited the Intersecretariat Working Group to elaborate proposals for definitions of vehicle energy types, e.g. biofuels, flex fuels and hybrids (ECE/TRANS/WP.6/159, para. 25).

2. The secretariat submits for information, definitions of vehicle energy types as used in UNECE Regulation No. 83 “Uniform Provisions concerning the Approval of Vehicles with Regard to the Emission of Pollutants According to Engine Fuel Requirements”.

II. Definitions of vehicle energy types

Hybrid vehicles (HV)

*General definition of hybrid vehicles (HV):*

“Hybrid vehicle (HV)” means a vehicle with at least two different energy converters and two different energy storage systems (on-vehicle) for the purpose of vehicle propulsion.
Definition of hybrid electric vehicles (HEV):

“Hybrid electric vehicle (HEV)” means a vehicle that, for the purpose of mechanical propulsion, draws energy from both of the following on-vehicle sources of stored energy/power:

- A consumable fuel;
- An electrical energy/power storage device (e.g., battery, capacitor, flywheel/generator, etc.).

“Mono-fuel vehicle” means a vehicle that is designed primarily for permanent running on Liquified Petroleum Gas (LPG) or Natural Gas (NG), but may also have a petrol system for emergency purposes for starting only, where the petrol tank does not contain more than 15 litres of petrol;

“Bi-fuel vehicle” means a vehicle that can run part-time on petrol and also part-time on either LPG or NG.