

## Continuous WP Transport Panel 2009-2012

### Road Transport

Class.	Theme	Particular Issues	Responsible/Participants	By
1	Uncertainty characterization and sensitivity analysis	Perform Monte-Carlo or similar type of statistical treatment to models to identify most important variables, give guidance on the detail required for activity data, uncertainty range of final calculation	JRC Study	Oct. 2009
2	Cold-start emissions	Better detail cold-start emissions, perform new measurements on new vehicle technologies, use PEMS to record cold over emissions, revise the methodology	JRC PEM LDV programme, LAT	2010
3	New technologies including hybrids	Develop emission factors, emission methodologies for new emission control technologies, such as strong hybrids, mild hybrids, SCR, GDI, Flexifuel	DACH, JRC, LAT	continuous
4	Biofuels and alternative fuels	Characterize links of vehicle technology / fuel use / blend, for example E85 effect on Euro 3 passenger cars, second generation biofuels, CNG, LPG, Biogas, Non-regulated pollutants	JRC, DACH,	Continuous
5	CO2 / fuel consumption characterization	Develop more classes for CO2 emissions (e.g. diesel <1.6 l, SUV, gasoline <1.0 l, etc.), develop correction factors based on average weight / capacity, CO2 from urea consumption	JRC Study	Early 2010
6	Characterization of the emission factors quality/variability	Assign a quality index on each emission factor (e.g. A, B, C) or a coefficient of variation value to express uncertainty, explain/discuss uncertainty, provide guidance for uncertainty of different approaches	See JRC Study on Uncertainty	Oct. 2009
7	Refine activity data	Conduct probe surveys on vehicle utilization, better describe vehicle classification (new, second-hand, deregistered, mopeds), collect and refine already available information from transportation statistics Update with FLEETS and EXTREMIS data (and, possibly, EUROCONTROL data on aviation consumption)	DACH, JRC, LAT	Continuous  2009
8	Validate existing emission factors	Validate existing emission factors (mostly based on dynamometer studies) by means of tunnel or roadside	JRC PEMS study, TUG, LAT	2010

		concentration measurements or Portable Emission Measurement Systems (PEMS), air-quality measurements		
9	Provide methods for spatial / temporal resolution	Develop good-practice guidance with regard to top-down and bottom-up approaches of road transport emission inventories, develop models to support such approach, streamline average-speed and traffic situation models	EEA, TRL	2009, 2010
10	Idling emissions	Provide idling emission factors (g/h) which may be significant for parking lots, for school busses, etc.	?	
11	Provide rules/values for projections	Develop detailed good-practice guidance for road transport projections, produce assessments of emission factors for emerging technologies, refine methodologies for stock replacement	EC4MACs	2012
12	Emission corrections	Corrections for ambient temperature, altitude, use of auxiliaries (air-con), vehicle age	DACH	2009
13	Non regulated pollutants	Conduct studies to measure NH3, NO2/NO, NMVOC speciation, PM speciation, metals from fuel consumption, metals from lubricant, metals from attrition, ion emissions (sulfate nitrate ammonium), PAHs and POPs	IFEU, JRC	continuous
14	Non-CO2 GHGs	Perform new measurements to characterize N2O, CH4 based on vehicle technology, operation conditions, fuel use	JRC, IFEU	continuous
15	Ultra-emitters	Estimate share of ultra-emitters by remote-sensing, provide emission factors for ultra-emitters, estimate the effect of OBD	IVL, INRETS	2009-2010
16	Maritime Navigation	Update emission factors and shipping activities at a Tier 3 level, using the Lloyds register	EEA, TECHNE, ISPRA	2009
17	Effect of biofuels	Discuss effect of biodiesel and bioethanol blends on air pollutants	NERI	2009
18	Revised Guidebook	Communicate experiences with the use of the revised Guidebook	All	2009