

DTP 10<sup>th</sup> meeting – Geneva 6<sup>th</sup> June 2012

# Update on the execution status of Validation Phase 2

Validation Task Force

## Validation Phase 2 plan (update April 2012)

	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
VP2 - ICE		Experimental tests in the Participating Laboratories			Analysis of results (VTF)		Confirmation Tests (tbd)		
VP2 - EV/HEV	Preparation of VP2		Experimental tests in the Participating Laboratories		Analysis of results (VTF)		Confirmation Tests (tbd)		
VP2 - LPV	Validation 1 (drivability tests)		tbd						

tbd = to be defined

On 16 April 2012 the first Info Package was uploaded to JRC ftp server (folder 18) and the VP2 experimental tests on ICE vehicles started.

On 15 May 2012 a new Info Package was uploaded, with instructions also for EV/HEV vehicles. This date can be considered as the starting date for the VP2 tests on EV/HEV.

Concerning Validation 1 tests on Low Powered Vehicles (Class 1 and Class 2 driving cycle), India delegation has presented an update at 13<sup>th</sup> DHC meeting (5 June 2012).

**(experimental activity will be completed by 6<sup>th</sup> July 2012)**

Laboratory/Company		Vehicle 1
TNO		Gasoline Passenger Car Direct Injection (High pnr)
	Engine	1.6 THP (115 kW)
	With Test Mass High (TMH)	
	Baseline Test	1.3 (*)
	Evaluation Item:	
	- Mode construction (Cold - Hot start)	2.3
	- PM/PN (normal)	1.3 & 2.3
	- PM/PN (during regeneration)	Not applicable
	- Class 2 test cycle	Not applicable
	With Test Mass Low (TML)	
	Baseline Test	1.3 (*)
	Evaluation Item:	
	- Mode construction (Cold - Hot start)	4.3
	- PM/PN (normal)	3.3 & 4.3
	- PM/PN (during regeneration)	Not applicable
	- Class 2 test cycle	Not applicable
(*) 1.3 (1=test number; 3= test repetitions)		

**(experimental activity will be completed by end of June 2012)**

Laboratory/Company		Vehicle 1	Vehicle 2	Vehicle 3
IAV		Diesel Passenger Car (High pmr)	Gasoline Passenger Car Direct Injection (High pmr)	Light Commercial CNG Vehicle (High pmr)
		finished	KW 23/24 2012	finished at 31.05.12
	With Test Mass High (TMH)			
	Baseline Test	1.3	5.3	3.3 (CNG-H)
	Evaluation Item:			
	- Mode construction (Cold - Hot start)	1.3 + 2.3	5.3+6.3	3.3 + 4.3
	- PM/PN (normal)	1.3	5.3	3.3 + 4.3
	- PM/PN (1 filter for all or each phasel)	2.3	6.3	
	- two reference fuel (CNG-L)			4.3 (CNG-L)
	- PM/PN (during regeneration)	Not applicable	Not applicable	Not applicable
	- Class 2 test cycle	Not applicable	Not applicable	No
	With Test Mass Low (TML)			
	Evaluation Item:			
	- Vehicle weight	No	No	No
	- Mode construction (Cold - Hot start)	No	No	No
	- PM/PN (normal)	No	No	No
	- PM/PN (during regeneration)	No	No	No
	- Class 2 test cycle	No	No	No
	(*) 1.3 (1=test number; 3= test repetitions)			

**(experimental activity will be completed by end of June 2012)**

Laboratory / Company		Vehicle 1	Vehicle 2	Vehicle 3
AFHB (CH)		Gasoline Passenger Car Port Injection (Medium pmr)	Gasoline Passenger Car Direct Injection (Medium pmr)	Diesel Passenger Car (Medium pmr)
	With Test Mass High (TMH)			
	Baseline Test	Planned	Planned	Planned
	Evaluation Item:			
	- Mode construction (Cold - Hot start)	Planned	Planned	Planned
	- PM/PN (normal)	Not applicable	Planned	Planned
	- PM/PN (during regeneration)	Not applicable	Not applicable	No
	- Class 2 test cycle	Not applicable	Not applicable	No
	With Test Mass Low (TML)			
	Evaluation Item:			
	- Vehicle weight	No	No	No
	- Mode construction (Cold - Hot start)	No	No	No
	- PM/PN (normal)	No	No	No
	- PM/PN (during regeneration)	No	No	No
- Class 2 test cycle	No	No	No	

Laboratory/Company		Vehicle 1	Vehicle 2	Vehicle 3
<b>Empa (CH)</b>  Preparation: July 2012 Testing: July/August 2012		Gasoline Passenger Car Direct Injection (High pmr)	Gasoline Passenger Car Indirect Injection (High pmr)	CNG Passenger Car Indirect Injection (High pmr)
	With Test Mass High (TMH)			
	Baseline Test	Planned	Planned	Planned
	Evaluation Item:			
	- Mode construction (Cold - Hot start)	Planned	Planned	Planned
	- PM/PN (normal)	Planned	Planned	Planned
	- PM/PN (during regeneration)	Not applicable	Not applicable	Not applicable
	- Class 2 test cycle	Not applicable	Not applicable	Not applicable
	With Test Mass Low (TML)			
	Evaluation Item:			
	- Vehicle weight	Planned	if time is available	if time is available
	- Mode construction (Cold - Hot start)	Planned	if time is available	if time is available
	- PM/PN (normal)	Planned	if time is available	if time is available
	- PM/PN (during regeneration)	Not applicable	Not applicable	Not applicable
	- Class 2 test cycle	Not applicable	Not applicable	Not applicable

Laboratory/Company		Vehicle 1	Vehicle 2	Vehicle 3	Vehicle 4	Vehicle 5	Vehicle 6
<b>AECC</b>  <b>Tests to be completed by mid-August</b>		Diesel passenger car (High pmr)	Gasoline passenger car Direct Injection (High pmr)	Gasoline passenger car Direct Injection (high pmr)	Diesel passenger car (High pmr)	Gasoline passenger car Direct Injection (medium pmr)	Gasoline hybrid passenger car (NOVC) (High pmr)
	With Test Mass High (TMH)						
	Baseline Test	3	2 + 1*	Planned	Planned	Planned	Planned
	Evaluation Item:						
	- Mode construction (Cold - Hot start)	3	2 + 1*	Planned	Planned	Planned	Planned
	- PM/PN (normal)	3	2 + 1*	Planned	Planned	Planned	Planned
	- PM/PN (during regeneration)	No	Not applicable	Not applicable	No	Not applicable	Not applicable
	- AP (NO <sub>2</sub> , NH <sub>3</sub> , N <sub>2</sub> O)	3	2 + 1*	Planned	Planned	Planned	Planned
	- Class 2 test cycle	Not applicable	Not applicable	Not applicable	Not applicable	No	No

**(experimental activity will be completed by end of June 2012)**

Laboratory/Company		Vehicle 1	Vehicle 2
UTAC		Diesel Passenger Car (High pnr)	only if time is available
	With Test Mass High (TMH)		
	Baseline Test	Planned	?
	Evaluation Item:		
	- Mode construction (Cold - Hot start)	Planned	?
	- PM/PN (normal)	Planned	?
	- N2O and NH3	Planned	?
	- PM filter stabilization	Planned	?
	With Test Mass Low (TML)		
	Evaluation Item:		
	- Vehicle weight	No	No
	- Mode construction (Cold - Hot start)	No	No
	- PM/PN (normal)	No	No
	- PM/PN (during regeneration)	No	No
	- Class 2 test cycle	No	No



**(experimental activity will be completed by end of June 2012)**

Laboratory/Company		Vehicle 1	Vehicle 2	Vehicle 2
JRC		Gasoline Passenger Car Direct Injection (High pmr)	Light Commercial Diesel Vehicle (Medium pmr)	Diesel Passenger Car (High pmr)
	With Test Mass High (TMH)			
	Baseline Test	1.3 (*)	5.3	Planned
	Evaluation Item:			
	- Mode construction (Cold - Hot start)	2.3	6.3	Planned
	- PM/PN (normal)	1.3 & 2.3	5.3 & 6.3	Planned
	- PM/PN (during regeneration)	Not applicable	No (Euro 4 - No DPF)	Planned
	- Class 2 test cycle	Not applicable	Not necessary	Not applicable
	With Test Mass Low (TML)			
	Evaluation Item:			
	- Vehicle weight	3.3	No	No
	- Mode construction (Cold - Hot start)	4.3	No	No
	- PM/PN (normal)	3.3 & 4.3	No	No
	- PM/PN (during regeneration)	Not applicable	No	No
	- Class 2 test cycle	Not applicable	No	No

- Bosmal (Poland) : VP2 tests have started and current plan is to complete them by end of July, as agreed at 2<sup>nd</sup> VTF+PLs meeting in Ispra.
- Dekra and TUEF (Germany): VP2 tests are ongoing and should be completed by end of July.
- Japan Laboratories (report from Ichikawa-san)
- ACEA Laboratories (report from W. Thiel)