

GRPE Informal Group on Heavy Duty Hybrids

6th HDH, Geneva, 06 June 2011



ECE - GRPE

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> The results of the 5th meeting are as follows:

- US EPA presentation
 - is part of Greenhouse gas (GHG) rule to be signed by 31/07/11
 - focus on CO2 of hybrid vs. conventional vehicle incl. PTO assessment
 - testing options are powerpack and chassis
- Environment Canada presentation
 - close collaboration with US EPA
 - evaluation of different drive cycles showed significant cycle influence on CO2 reduction potential
- Cummins presentation
 - simulation will be an essential part of hybrid certification
 - hybrid certification should build on existing engine certification
- Japan presentation on open source model
 - rigid model presented in detail
 - fluid coupling and torque converter model under development



UNITED NATIONS Task List for HDH Research Program

- To accomodate with its mandate, HDH will conduct a research program on the major elements of the HILS method. The research program covers the following five tasks:
 - Task 1: Investigation and modification, if applicable, of the Japanese HILS model and interface including a proposal for a verification method w/o vehicle testing
 - Task 2: Investigation and modification, if applicable, of the HILS component testing
 - Task 3: Extension of HILS to non-electrical hybrids, which are currently not covered by the Japanese test procedure
 - Task 4: Inclusion of PTO operation, which normally takes place outside the test cycle
 - Task 5: Development of WHVC weighting/scaling factors to represent real world vehicle operation



HDH Research Program

Quotes

- A request for quote on the five tasks was sent on 16/02/2011
- Offers were received by TU Graz / TU Vienna (joint program) and Chalmers University
- Project Overview
 - HDH agreed at the 5th meeting that all three institutes be involved in the research program; the following project plan is proposed
 - TU Vienna will cover tasks 1 and 2; budget by OICA
 - TU Graz will cover tasks 4 and 5; budget by EU COM
 - Chalmers will cover task 3 and contribute to tasks 1, 4 and 5; budget shared between OICA, Sweden and Swedish Hybrid Center (SHC)
 - TRL will coordinate the program
 - Total budget is 265 k€



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Cost Overview

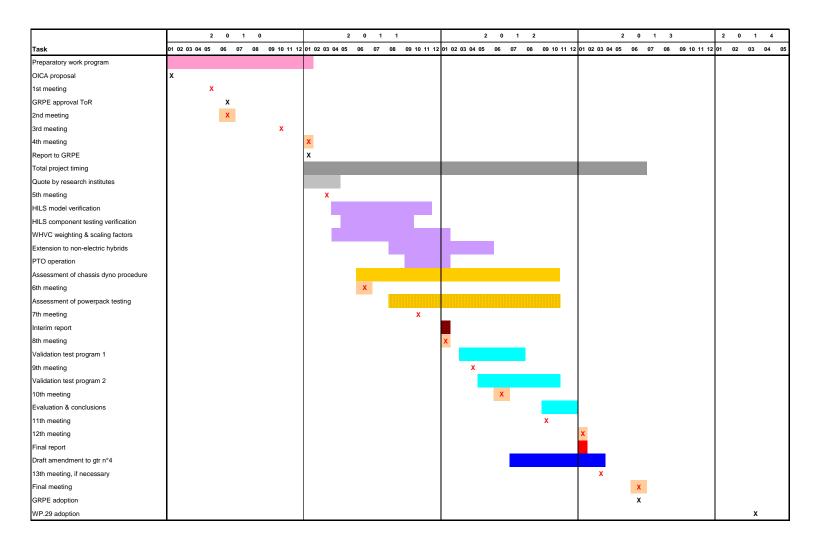
Task	TU Vienna	TU Graz	Chalmers
1	40 k€	10 k€	4 k€
2	45 k€	-	-
3	-	-	47 k€
4	-	28 k€	2 k€
5	-	41 k€	3 k€
Travel	15 k€	15 k€	15 k€
TOTAL	100 k€	94 k€	71 k€
Budget by	OICA	EU-COM	OICA: 25 k€ Sweden: 19 k€ SHC: 27 k€



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Roadmap & Project Planning



No change to agreed roadmap, so far; project is largely on schedule