

Report on participation in the meeting of the
IEA Transport Contact Group (TCG)

Villa Sarasin, Geneva, 09 March 2009

by Axel Munack

Participants

Title	First name	Name	Representation	Country
Mr.	Peter	Cunz	Federal Office of Energy (OFEN), CERT ¹ Chairman	Switzerland
Mr.	Bernhard	Egger	Hybrid and Electric Vehicles IA	Austria
Mr.	Thomas	Grube	Advanced Fuel Cells IA	Germany
Mr.	Jürgen	Lexow	Advanced Materials for Transportation IA	Germany
Mr.	Axel	Munack	Bioenergy IA (Task 39)	Germany
Mr.	Urs	Muntwyler	Hybrid and Electric Vehicles IA	Switzerland
Mr.	Nils-Olof	Nylund	Advanced Motor Fuels IA; End-Use Working Party	Finland
Mrs.	Annette	Schou	Renewable Energy Technology Deployment IA	Denmark

IEA Internal Participants

Mr.	Pierpaolo	Cazzola	International Energy Agency, Energy Technology	IEA Secretariat
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Agenda

1.	12h00: Welcome	Peter Cunz, CERT Chair; Nils-Olof Nylund, EUWP
2.	Roundtable introduction	Participants
3.	Reporting and news from the transport related Implementing Agreements	IA representatives
4.	Presentation of IA Strategic Plans a) Hybrid and Electric Vehicles b) Advanced Motor Fuels	Urs Muntwyler Nils-Olof Nylund
5.	Discussions on increased cooperation within the transport related Implementing Agreements a) General b) case AMF's bus initiative	
6.	The RETRANS initiative by RETD	Annette Schou
7.	Feedback from IEA's NEET activities	Nils-Olof Nylund
8.	IEA representation at the International Advanced Mobility Forum IAMF	
9.	Other Issues	
10.	Next meeting	
11.	18h00: Close of meeting	

¹ AFC – Advanced Fuel Cells IA
 AMF – Advanced Motor Fuels IA
 AMT – Advanced Materials for Transportation IA
 Bioenergy – Bioenergy IA (Task 39 Liquid Biofuels)
 CERT – Committee on Energy Research and Technology
 ECERC – Energy Conservation and Emissions Reduction in Combustion IA
 EUWP – End Use Working Party
 HEV – Hybrid and Electric Vehicles IA
 H2 – Hydrogen IA
 NEET – Networks on Expertise in Energy Technology
 RETD – Renewable Energy Technology Deployment IA

TOP 1: In the welcoming address, Peter Cunz pointed out that cooperation between the IA's cannot be accomplished within CERT but should be obtained on the level just "above" the IA's. Therefore he welcomed the work done in the TCG and announced that a second group, dealing with Storage, will soon be founded. Nils-Olof Nylund also welcomed the participants and mentioned that the name of the group was changed from "Transport Coordination Group" to "Transport Contact Group", since the group does not have any mandate to coordinate. Nils-Olof regretted that no-one was present from the ECERC and H2 (for the abbreviations, see footnote on first page).

TOPs 3+4: Urs Muntwyler reported that the new strategic plan for **HEV** (2009-2014) will be presented next fall. The IA founded Annex XIV "Lessons Learned" and, in March 2008, Annex XV "Plug-in Hybrid Vehicles". He sees the biggest problems for a rapid implementation of mass-produced hybrid electric vehicles in the need for specialists in industry and in service. If only half of the existing 800 million private cars will be replaced by electric cars, then it would need millions of specialists. Further problems lie in the large need for special materials for building the batteries and all the electrical connections. A further field of R&D lies in the grid infrastructure; "smart grid" structures are studied, and the connection of the car to the grid is examined – "V2G"=Vehicle to grid. HEV gives several awards in order to encourage further development: "Clean Vehicle Award" to manufacturers that produce more than 25,000 electric vehicles; "Best Practice Award"; "Personal Award". Future interest of HEV lies in trolley buses, airplanes, and ships. In the discussion, Nils-Olof pointed out that a calculation, based on actual prices, results in battery costs that amount to 30,000 to 60,000 € for a passenger car, which shows that there is a lot to do before this technology becomes widely applied.

I reported on the actual German situation (as one of the prominent producers and users of liquid biofuels) and then presented IEA **Bioenergy** by mentioning the actually running Tasks, in particular those related to transport. I invited the participants to consider their attendance in the Dresden Workshop and the Vancouver Symposium, and distributed flyers for these two events. The participants showed interest in cooperations, e.g. in hybrid vehicles that are fueled with biofuel and their well-to-wheel analysis. Nils-Olof pointed out that the cooperation of IEA Bioenergy and AMF concerning Fuel and Technology Alternatives for Buses seems to be on a good way.

Thomas Grube presented **AFC**. The new Annex XX "Fuel Cells for Transportation" deals with advanced fuel cells, on-board H₂ storage, H₂ infrastructure and technology validation and economics. State-of-the-technology are costs of 100 \$/kW, target for 2015 is 30 \$/kW, as well as 2,000 hrs and 5,000 hrs of lifetime, respectively. A major problem is the storage; alternatives are: compressed, liquefied, or storage in solids. All of them are at present not satisfactory (e.g., a pressurized storage at 800 bar results in an efficiency loss of 13%).

Jürgen Lexow reported on **AMT**. New Annexes deal with Magnesium as lightweight material (corrosion problems), Carbon fibres, and Polymer materials (nano particles).

Nils-Olof Nylund presented IEA-**AMF**. Scope are alternative fuels as well as advanced petroleum based fuels. In 2008, Austria, China, and Thailand joined as new members. The strategic plan for 2009-2014 has been formulated. 29 Annexes were completed until now, 6 are actively running. The average budgeted is 200,000 \$ per Annex, an amount that is collected on a cost-shared basis. The IA seeks cooperation with IEA Bioenergy on the Bus initiative and, probably, on the "Algae as Feedstock for Biofuels" topic.

TOP 6: Annette Schou from the Danish Energy Agency reported on the RETRANS activity of **RETD**. RETRANS stands for "Deployment options for Renewable Energy in the Transport Sector". The project focuses on hydrogen fuel and will be structured in (1) Technology overview; (2) Hydrogen vehicles; (3) Policy measures; (4) Conclusions and recommendations. Due to the restriction on H₂, a cooperation with IEA Bioenergy is not under discussion. IEA Bioenergy is cooperating with RETD within the project "Better Use of Biomass for Energy".

Because of the thematic closeness, during this topic also the purpose and probable tasks of IRENA (the recently founded International Renewable Energy Agency) were discussed. The participants stated that no-one among them really knew details about aims, structure, and organization of this new agency. However, with an annual budget of 25 Mill \$, the agency will play a major role in the sector of renewables. Austria had offered to host an IRENA Workshop in the second half of April. Bernhard Egger will try to participate and then give a report to the TCG.

TOP 5: All participants unanimously agreed to increase their cooperation in the transport sector. The project on “Fuel and Technology Alternatives for Buses” will offer such an opportunity, where IEA Bioenergy could deliver the part on fuel production. The respective decision of the ExCo has to be awaited. The topic of algae could be another item for cooperative action. Further cooperations among IA’s could consist of tribology for bio-lubricants or the future perspectives for short-distance vs. long-distance travelling.

TOP 7: Since Peter Cunz already had to leave before this topic, Nils-Olof Nylund only reported briefly about the outcome of a meeting in Moskow (Nov. 2008). Many IEA IA’s reported on their work, as well as their Russian “counterparts”. However, the broadness of IEA topics made a real discussion on possible cooperations nearly impossible.

TOP 8: IEA activities are well presented on the International Advanced Mobility Forum in conjunction with the 2009 Geneva Motor Show. Five members of the TCG meeting are going to give presentations during the Forum. The next IAMF probably will be not supported by the IEA Headquarters.

TOP 9: Pierpaolo Cazzola reported on some activities of the IEA. The Transport Book is going to appear soon as new publication by the IEA; it will be sent to the IA’s soon for review. Future IEA publications are going to deal with Public Transport, Modal Shift and other related topics.

TOP 10: Since IAMF 2010 probably will be not supported by the IEA Headquarters, time and location for the next TCG meeting are still open. All participants agreed to meet again in Spring next year; the meeting should take place in conjunction with another event (workshop, conference, etc.).

TOP 11: The meeting closed at 18h05.

Proposal for Task 39 action:

- Stay in contact with the Transport Contact Group (Axel Munack as liaison member)
- Explore the opportunities for joint actions with other IEA-IA’s, in particular, with IEA-AMF. Concrete topics are already the bus initiative and, probably, algae.

Braunschweig, March 17, 2009

Axel Munack