

# IEA Hybrid and Electric Vehicles

NEWSLETTER - Volume 1, Issue 1

January 2000

## Welcome to this first issue of our newsletter.

**Urs Muntwyler**

Chairman

Welcome to this first issue of our newsletter. It is part of our new approach to increase the benefit/cost ratio of our Agreement. We shall increase the benefits by proposing new Annexes and better supporting the work of existing ones, and we shall reduce the travel and other costs by having only one Executive Committee meeting per year. The purpose of this newsletter is to ensure that all Executive Committee members and Experts remain informed of what is being done, and to keep up the momentum of the work. I have been working on some promising initiatives during the past three months, and have observed a continuing high level of interest in our Agreement. You will find the details in the following pages. I wish you all a happy new millenium, and look forward to continuing good progress with our Implementing Agreement. ♦♦

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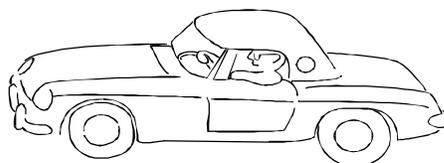
## Readers Guide

**Frans Koch**

Secretary

This newsletter is quite long, because in a way it takes the place of an Executive Committee meeting and a briefing book. To make it easier to read, we have summarized the main events in articles in the first 7 pages, and then added appendixes at the end which contain more detailed information. You have probably already seen the table of contents at the bottom left hand corner of this page.

The easiest way to read this newsletter is probably to print it out, rather than trying to read it on your computer monitor. If you have any difficulties with fonts, graphics, or software, please let me know and we can make adjustments in future issues. Please give us any other comments and suggestions you may have on how to improve this newsletter. ♦♦



*What type of drivetrain will be in this car in 2005?. (see p.5)*

## Fuel Cell Vehicles – A new Annex

*Progress Report on starting a new Annex on Fuel Cell Vehicles.*

**Urs Muntwyler**

Chairman

Development of fuel cell vehicles by industry continues at an intense pace, and Governments are continuing to strongly support this technology. Three IEA Implementing Agreements have worked on this, the Fuel Cell I/A, the Hydrogen I/A, and our own. I met with Mr. Hühlein, the Operating Agent of the Transportation

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### **Fuel Cell Vehicles – A new Annex**

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Annex of the Fuel Cell Agreement in Berlin on January 11, 2000. This Annex is now completed and their experience with task sharing was not entirely satisfactory because each participant had to contribute 18 person-months per year. I shall also make contacts with the Hydrogen Implementing Agreement, and explore the possibilities of a joint Annex.

There is a strong interest in a Fuel Cell Vehicle Annex, and we should try to bring it to the operational stage as soon as possible. The next steps are:

- maintain contact with the Fuel Cell and Hydrogen Agreements
- find an operating agent
- organize a workshop in Berlin on June 30, 2000.

The German Government and industry will sponsor a major conference on fuel cells on June 28,29, 2000 in Berlin. This initiative followed the Coordinating Committee for Transportation (CCT) meeting in Helsinki in June of last year, where Mr. Landwehr of the IEA had made a proposal for “round table” meetings. At that time, Mr. Höhlelein agreed to

approach the German Government and ask for their support. The idea was so well received that it grew from a modest round table into a major conference involving the IEA Implementing Agreements, Government research organizations, and industry. The notes that Mr. Landwehr made at the planning meeting in Berlin on January 11, 2000, are included as Appendix 1 to this newsletter.

One view is that industry will now take care of further fuel cell development, and that Government involvement is no longer required. However, I believe that there is a Government role in ensuring that fuel cell technology is as environmentally friendly as it can possibly be. For example, there are proposals to use either gasoline or methanol as fuel for the reformer, or to use pure hydrogen. The greenhouse gas and other emissions from these 3 technologies are very different, and governments may be interested in encouraging the most environmentally friendly and energy efficient approach. This is just one issue which could be part of the work program of the new Annex, no doubt many other issues will come up during the Berlin conference.

The day after the Berlin conference, Friday June 30, there will be an IEA workshop specifically to discuss starting up a new Annex on fuel cell vehicles, probably it will be a joint Annex with the Fuel Cell I/A and the Hydrogen I/A. ExCo members are requested to contact organizations interested in fuel cell vehicles in their countries, and invite them to the workshop.

The most immediate priority is to identify an interim Operating Agent. I shall continue to work on this, but suggestions from Executive Committee members would be gratefully received. ♦ ♦

## **Interest from China and Russia**

*China and Russia are interested in participating in the Implementing Agreement*

**Frans Koch**  
Secretary

### **China**

Participants in the last Executive Committee meeting in Beijing will recall that Prof. Lun Jingguang of Tsinghua University was our much appreciated guest

## **Interest from China and Russia**

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speaker. The notes on his presentation were included in the “short report” which was e-mailed to members 10 days after the meeting, on October 29. Professor Lun has sent me an e-mail with some corrections on these notes, they are included as Appendix 2 to this newsletter.

We would like to make it possible for China to participate in our Agreement, and the Chairman and Secretary will continue to explore possibilities for financial support. Any suggestions from Executive Committee members on this matter would be highly appreciated.

### **Russia**

The Operating Agent of Annex 1, Mr. Iwane Shiozaki, has received a letter from Russia from Prof. Ivan Ksenevitch, the President of the Russian Electric Vehicle Association (REVA). He asked for permission to translate our Annual Report 1997-98 into Russian, and asked how Russia could join the Agreement. The Secretary has replied granting permission for the translation, and outlining the procedure for joining. ♦♦

## **Batteries and Storage Systems – a renewed Annex**

### **Urs Muntwyler**

Chairman

The Austrian Government has agreed to support Prof. Karl Kordesch and Dr. Viktor Hacker as new Operating Agents for a renewed annex on batteries, with the tentative title of “Batteries and Storage Systems”. I met with Prof. Kordesch and Dr. Hacker in Graz, Austria on January 7. Dr. Hacker has prepared a proposal for the new Annex, and I recommended that he send it to the “old participants” in Annex V, and then to ExCo members. We look forward to a fresh start with the new annex on this very important subject. ♦♦

## **Other New Annexes**

### **Urs Muntwyler**

Chairman

### **Electric Scooters and Bicycles**

Contact has been made with a person who is very interested in electric bicycles, he is Dr. Andreas Fuchs of the Bern Institute of Technology. Dr. Fuchs is an advocate of human powered vehicles. He has worked on electric bicycle projects for many years, and is well known in the “electric bicycle community”. Dr. Fuchs has many other commitments, but he has agreed to do the initial work of an interim Operating Agent to start a new Annex on electric bikes, scooters, and light weight vehicles. He would be supported by Mr. Theodor Schmidt, who is also well known in the electric bicycle community. I met with Dr. Fuchs and Mr. Schmidt on January 13, and they will work out a proposal, and seek participation from interested countries and organizations.

At the Beijing meeting we heard from Prof. Lun how the city of Shanghai wishes to replace the 500,000 bicycles powered by small two-stroke engines with electric bicycles. This illustrates the potential electric bicycles have for reducing emissions and greenhouse gases.

### **Environmental Impacts**

ECN of the Netherlands had developed an initial proposal for a new Annex on how the transportation sector could reach environmental targets such as reduction of greenhouse gas emissions (Kyoto targets) and of urban air pollution (World Health Organization targets). The work has been halted pending a clarification of the financial situation in the Netherlands.

### **Hybrid and Electric Vehicles Powered by Renewable Energy.**

After fuel cells, this topic received the second highest number of votes at our ExCo meeting in Beijing. (13 points, 5 countries thought it was an interesting subject). If more direct links could be established between hydro, wind or solar generation of electricity and hybrid and electric vehicles, such as “green electricity” marketing concepts in countries with

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## **Other Annexes**

*continued from page 3*

“brown” electricity generation mixes, then the environmental performance of electric vehicles would be greatly enhanced. There is a natural complementarity between the intermittent generation of wind and solar electricity, and the storage capabilities of hybrid and electric vehicles. We shall continue to look for an interim Operating Agent for this proposal, any suggestions from ExCo members would be greatly appreciated.

### **Heavy Duty Hybrid and Electric Vehicles**

Many countries are working on hybrid buses for public transit, and work is also done on other specialized heavy duty vehicles such as garbage trucks, municipal vehicles, etc. This subject was the third most popular one at our meeting in Beijing. We are still looking for an interim Operating Agent.

### **Hybrid and Electric Vehicles in Developing Countries**

A working group has been formed of persons interested in Hybrid and Electric Vehicles in developing countries, consisting of Mr Schweizer, the battery expert of Horlacher, and Mr. Markus Eisenring who has written a small book on “EV’s in developing countries”. Interested persons are requested to contact either the Chairman or the Secretary. ♦♦

### **Information Exchange – Annex 1**

**Iwane Shiozaki**  
Operating Agent – NEDO

We are working hard on completing the End of Term report, and making the arrangements for printing it.

The next Experts’ Meeting will be in Finland, on May 15-17, 2000, the exact place remains to be decided. The plan is to have the Annex 1 meeting on May 15<sup>th</sup>, a MOBILE and IEA seminar on HEVs on the 16<sup>th</sup>, and a technical excursion on the 17<sup>th</sup> if there is sufficient interest. Possibilities include Elcat EV’s, Finland Post, and PT Automotive Services. More information will be provided as the meeting date gets closer. ♦♦

## **Hybrid Vehicles – Annex 7**

**Frans Koch**  
Secretary

The Annex 7 Experts’ Meeting at VITO in Mol, Belgium is going on while this newsletter is being written (January 18 and 19). We hope to have a report on this meeting in our next issue. The next Experts’ meeting will be hosted by NREL and will be in Arlington, Virginia, USA. ♦♦

## **Deployment Strategies – Annex 8**

**Sigrid Kleindienst-Muntwyler**  
Operating Agent

As you know, Annex 8 officially entered into force on January 1, 2000. The occasion was marked by fireworks in most of the major capitals of the world. The first Experts’ Meeting will be held in Zurich on February 24 and 25. We are looking forward to starting the work of the Annex.

Those countries which have not yet informed Mr. Landwehr whether they will participate from the side of the Advanced Motor Fuel Agreement or from the Hybrid and Electric Vehicle Agreement are kindly requested to do so as soon as possible. ♦♦

## **Status of Participation in the Agreement**

**Frans Koch**  
Secretary

### **Austria**

As mentioned by Mr. Muntwyler on page 3, Austria has decided to participate in Phase 2 of the Agreement. During phase 1, AMOR was designated to represent Austria in the Agreement. Government regulations require that for phase 2 a new contract will be awarded, which could remain with AMOR or might be awarded to another organization.

## **Canada**

Canada has decided not to continue with phase 2 of the Agreement. The Secretary met with Stephanie Lines on January 12. She stated that if in addition to Annex 1, one more new Annex is started which is of interest to Canadian organizations, Canada would re-join. Natural Resources Canada wishes to remain informed of events with the Agreement.

## **France**

France has joined Annex 7 on Hybrid Vehicles.

## **Germany**

Similarly to Canada, Germany will not continue with phase 2 unless new Annexes of interest to German organizations are started up. German industry (BMW, VW, Daimler-Chrysler, Shell, Aral, RWE, etc.) will complete a very comprehensive study on future drive trains in February 2000 and will provide us with a copy. Germany has asked to remain informed on events with the Agreement. Mr. Quadflieg will retire in May, and his successor will likely be Dr. Kohnen.

## **The Netherlands**

The Netherlands continues to work on the problem they face with financing their participation in the Agreement. No decision has been reached as yet.

## **Sweden**

Mr. Lars Guldbrand has been promoted and one of his new responsibilities is to be the Swedish representative on the Renewable Energy Working Party. His successor is Mr. Mikael Fjällstrom of the Swedish National Energy Administration (e-mail: mikael.fjallstrom@stem.se). We congratulate Mr. Guldbrand, and we welcome Mr. Fjällstrom.

## **United Kingdom**

Ms. Maureen Allalat-Beresford was promoted in February 1999. Her successor is Mr. Raymond Wicks, and we welcome him. The Secretary met with Josephine Cook and Raymond Wicks in London on November 22. The UK would be interested in continuing with phase 2 if there were one or more Annexes of interest to British organizations. We could either identify British organizations which want to participate in one of the existing Annexes, or we could start up new Annexes of interest to the UK. ♦♦

# **The 1999 Annual Report**

## **Frans Koch**

Secretary

The Chairman and Secretary have discussed the schedule and the content of the 1999 Annual Report. The proposed content will be rather extensive chapters on the work of each of the four Annexes which were operational during phase 1, and a summary of their findings and conclusions. The country chapter would be shorter than previously, and consists of a one or two page up-date on recent developments in each of our member countries. The request to each country to write such a short contribution will be sent out during the next few days. With respect to the schedule, it is hoped to receive the contributions from each country in mid February, and to print the report in March or April. This would re-establish the schedule which we had for the first three reports. ♦♦

# **The Strategy Document**

## **Urs Muntwyler**

Chairman

One of the tasks assigned to me was to prepare a draft strategy document for phase 2. A rough draft is ready, but still requires more work by myself and the Secretary. It is based on the previous strategy documents which had been prepared, and also on model strategies done by other Implementing Agreements which Mr. Landwehr kindly sent to me. We shall circulate the draft for comments as soon as we have it in satisfactory form. ♦♦

# **Dissemination Strategy**

## **Frans Koch**

Secretary

At the April 1999 ExCo meeting in Korea, Thomas Fischer and myself presented proposals for a dissemination strategy. The committee decided that a survey should be made of all ExCo members asking them how they related with the different target groups in their countries, for example through mailing lists, through media channels, etc. This has not been forgotten, and will be done after the contributions for

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## **Dissemination Strategy**

*continued from page 5*

the 1999 Annual Report have been received. This is mainly a question of priorities and the unfortunate fact of life that not everything can be done all at the same time.

The Committee also decided that Thomas Fischer and myself should work out a new proposal for a dissemination strategy. This will be done if it is confirmed that AMOR will be designated by the Austrian Government to represent it in phase 2. Otherwise I shall do it by myself.

Finally, there were a number of practical dissemination activities which were approved, such as improving our web-site and designing a new logo. All these items are on the work program, and will be done when the 1999 Annual Report is completed.

During the past year it has become especially clear how important dissemination activities are. If industry and research organizations in our member countries are not aware of the activities of our Agreement, they will not ask their Governments to participate. It is also vital that we make our plans for new Annexes known as widely as possible, so that they can start more quickly and with more participants. ♦♦

## **Virtual Working Week in May 2000**

**Urs Muntwyler**  
Chairman

This newsletter shows that there is a lot of work to be done, also by the Executive Committee members. We would like to ask you to reserve for the Implementing Agreement a little bit of your working time in May 2000, but not the full four working days we saved by not having a Spring meeting. The proposal is to have a "Virtual Working Week" or we could also call it a "Cyber Conference". Everyone would reserve two working hours per day for one week in May. The Chairman and Secretary would e-mail an agenda or a program for each day of the week to all members. During the five days, we would

run through this program. Executive Committee members might be asked for their views on particular topics, just like a real meeting, and they would reply by e-mail to all the other members. Members might also be asked to do some tasks, such as contacting industry representatives or colleagues in their government on the subject of the new Annexes. The main aims would be to accelerate the start-up of the new annexes, to keep members informed of recent developments, and to keep up the momentum of the work in general.

Further details of this proposal will appear in the next newsletter (April 2000), but in the meantime I would be grateful if you could give my your opinions on this idea.

♦♦

## **Action Items and Work Program**

**Frans Koch**  
Secretary

### **Executive Committee Members**

The action items for executive committee members arising from this newsletter, and also those of the last two meetings, are included as Appendix 3. You may find this a useful reminder in case some of these items have not yet been completed.

### **Secretary**

The action items arising from the last two meetings and from recent developments are listed in Appendix 4. There are 49 of them, of which 19 have been completed and 30 remain to be done. However, there are numerous tasks related to individual Executive Committee members, the Annexes, interested countries, and administration which are not shown on the list. A work program (or time budget) is also included in Appendix 4. These two tables were prepared to ensure that the high priority items get done first, and that items with strict deadlines, such as meetings, are organized in good time. The action items and work program give a good idea of the work that will be done during the coming year. Comments and suggestions for improvement are welcome. ♦♦

## **CALENDAR OF EVENTS:**

### **ANNEX 7 – EXPERTS’ MEETING**

JANUARY 18, 19, 2000 - MOL, BELGIUM

### **ANNEX 8 – EXPERTS’ MEETING**

FEBRUARY 24,25, 2000 – ZURICH, SWITZERLAND

### **ANNEX 7 – EXPERTS’ MEETING**

APRIL 6,7, 2000 – ARLINGTON, VA. USA

### **ANNEX 1 – EXPERTS’ MEETING**

MAY 15-17, 2000 – FINLAND, EXACT PLACE REMAINS TO BE DECIDED

### **“VIRTUAL WORK WEEK” OR “CYBER CONFERENCE”**

MAY 2000

### **FUEL CELL CONFERENCE IN BERLIN**

JUNE 28,29, 2000 – BERLIN, GERMANY

### **IEA FUEL CELL ANNEX WORKSHOP**

JUNE 30, 2000 – BERLIN, GERMANY

### **COORDINATING COMMITTEE FOR TRANSPORTATION (CCT)**

TO BE CONFIRMED, POSSIBLY JUNE 30, 2000 IN BERLIN

### **ANNEX 7 – EXPERTS’ MEETING**

AUGUST 2000 IN SWEDEN, TO BE HOSTED BY KFB

### **ANNEX 1 – EXPERTS’ MEETING**

OCTOBER 19, 2000 – MONTREAL, CANADA

### **EVS-17**

OCTOBER 15-18, 2000 – MONTREAL, CANADA

## **Enquiries and Correspondence:**

Enquiries and correspondence about this newsletter may be addressed to:

Mr. Frans Koch

Secretary

Implementing Agreement for Hybrid and Electric Vehicle Technologies and Programmes

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# APPENDIX 1 – REPORT ON THE FUEL CELL CONFERENCE PLANNING

## MEETING IN BERLIN

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Informal Minutes, steering committee meeting of a future fuel cell conference, Berlin, Bewag, 11/1/2000

Michael Landwehr, 12/1/99

Present:

Mr Erdmann, TU Berlin and GEE (German affiliation of the international society of energy economists)

Mr Fleischer, TAB (Parliamentary service for technology assessment, Germany)

Mr Hoehlein, FZ-Juelich (charged by German ministry for economic affairs, BMWi)

Mr Landwehr, IEA Secretariat

Mr Muntwyler, IA on hybrid and electric vehicles

Mr Pokojski, BEWAG (Electricity Utility Berlin, host)

Mrs Oertel, TAB

Objectives of conference

- To bring policy makers and industry on a strategic level together;
- No technical discussion, rather application side and potential role of FC to be touched;
- Move focus from research funding to deployment and environmental policy objectives;
- Create statements and messages for market stimulation action;

Target audience:

- Upper management in industry (fuel, manufacturers) and government,
- Gov. programme managers
- German Parliament delegates,
- Industry/policy analysts;
- To a minor degree other groups (research etc.)

Guiding questions to speakers and sessions (to be refined and finalised by Erdmann, to serve as a focus of oral contributions)

- What are medium to long-term impact/benefits from fuel cell technologies in different areas (stationary, mobile) – vision?
- What is the relative situation/assessment of fuel cell technologies compared to conventional options;
- What are market player roles, what are gov. roles to achieve deployment and benefits from fuel cells in the long term;
- What could be milestones, steps towards introduction for government and industry for the next 20 years;

Workshop details and structure

- Date: 28/29 June (two half days or 1½ days),
- 30 June to be reserved for meeting between IEA and IA stakeholders, possibly under the umbrella of CCT; conclusions for IEA collaboration to be drawn;
- Location: Heizkraftwerk Moabit (conference room);
- Expected size (open call for interest): 150 people
- GEE is organiser (co-organisers are IEA, the IAs on HEV, AMF and AFC, BEWAG, BMWi)
- English (translation into German);
- Sessions consist of “statements” rather than fully refined articles/speeches. About 15 minutes, then discussion;
- Abstracts to be supplied by speakers before (to help to guide and target the contributions);
- Each session has a chair/rapporteur, summary paper of session to be produced, rapporteurs to contribute to final round table discussion;
- No proceedings, but potentially a written summary of contribution and discussions / summary of sessions/statements;
- Deadlines: programme to be finalised by end of February, then flyer with invitation available for mailing by GEE;
- Mailing list: GEE national and international mailing list (members etc.); other steering committee members to contribute with additional mailing list addresses (or send it themselves)
- moderate fees (~150 Euro) will be charged to participants; Sponsors needed for financing catering and interpretation,

# APPENDIX 1 – REPORT ON THE FUEL CELL CONFERENCE PLANNING

## MEETING IN BERLIN

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### Workshop layout

1. Introduction – BEWAG (Welcome), GEE (purpose of conference, key questions);
2. Vision on fuel cells - Winter (contacted by Hoehlein, Pokojnsky);
3. Perspectives on stationary systems;
  - BEWAG
  - Vaillant/Plugpower GE
  - MCFC Japan
  - Portable applications (Heinzel, Fhg ISE, contacted by Pokojnsky)
  - ?
  - ?
4. Perspectives on vehicle applications
  - Daimler Chrysler: Noreikat (contacted by Hoehlein)
  - Ford: Ron Sims (? , in IA on AFC contacted by Hoehlein)
  - Toyota (to be identified through LEVO/NEDO, contacted by Landwehr/Muntwyler)
  - IA on HEV: Smokers, TNO (contacted by Muntwyler/Landwehr)
  - IA on fuel cells: Hoehlein, Erdmann
  - Ifeu: Hoepfner (contacted by Hoehlein)
  - IfP: Andre Douard, Alain Feugier (contacted through Landwehr)
5. Fuels infrastructure
  - VES procedure (Germany) for identifying fuel
  - UK approach ? (to be contacted through Landwehr)
  - Methanex (contacted through Hoehlein, Chalk)
  - LEVO/NEDO (contacted through Landwehr/Muntwyler)
6. Integration stakeholder and government action into a consistent policy
  - EU approach (Pontieu DG 12, to be contacted through Hoehlein?)
  - Japan: NEDO LEVO (to be contacted through Landwehr/Muntwyler)
  - DoE Steve Chalk (in IA on AFC, contacted through Hoehlein)
  - BMWi (Federal economic ministry)
  - UBA (German Environment Agency)
7. RT discussion: lessons, recommendations, next steps

Accompanying programme:

Wednesday 28/6: late afternoon: guided BEWAG fuel cell demo plant visit; diner (boat?) afterwards

Thursday: evening??

## **APPENDIX 2 - CORRECTIONS TO NOTES ON PROFESSOR LUN'S PRESENTATION.**

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Dear Mr. Koch;

Thank you very much for your report titled "Short Report on the Executive Committee Meeting in Beijing", which was transferred to me a few days ago, because I left China to US for private affair on Nov. 1 and shall stay here until early next year.

I am very happy to have a chance to know more about IEA's activities in EV & HEV field, I have report the IEA's Beijing Meeting to the related Department of China Ministry of Science and Technology and remained Mr. Muntwyler's and your name cards to them for further communication.

Concerning the Appendix 2 in IEA's "short report"--Question and Answers about the Hybrid and Electric Vehicle Situation in China, I would like to point out;

1. Three lines from the bottom on Page 12

As I know related Department of China Ministry of Science and Technology didn't release the fund for R/D in alternative fuel, fuel cell and nickel metal hydride batteries and vehicles, I am not the officer in charge of these programs, I do not know the exact fund, the data in my answer are only my personal estimated for Member's (in the Meeting) reference, in order to avoid the misunderstand, please cancel the concrete funding data in IEA's publication and do not quote in other material.

2. 19th line from top on page 13

"in 12 cities in China there are about 10,000 CNG buses" please correct as "---10,000 CNG buses, trucks and other vehicles"

3. 3rd line from bottom on page 14

"---11 EVs made in China" there was a confusing in seven and eleven, the right one is "seven"

My current e-mail address in US is;

jglun@hotmail.com

Tel: 201-750-8636

Fax: 201-750-9335

You can still use my Tel, Fax, and e-mail address in China my colleagues will transfer to me.

Best regards,

Sincerely

Lun Jingguang

Tsinghua Hua University

Beijing, China

## APPENDIX 3 – ACTION ITEMS FOR EXECUTIVE COMMITTEE MEMBERS

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- Forward to the Chairman or Secretary any suggestions you may have for an organization in your country which could be the Interim Operating Agent for the new Annex on Fuel Cell Vehicles.
- Identify organizations in your country which would be interested in participating in the new Annex on Fuel Cell Vehicles, and invite them to the planning workshop in Berlin on June 30, 2000.
- Inform interested organizations in your country that the Annex on Batteries and Storage systems will start again and suggest they contact the new Operating Agent:

Dr. Viktor Hacker

University of Technology Graz

Institute of High Voltage Engineering

Infeldgasse 18

A 8010 Graz, AUSTRIA

Tel: +(43) 316 873 7406 Fax: +(43) 316 873 7900 E-mail: hacker@hspt.tu-graz.ac.at

- Determine if there are organizations in your country which would be interested in participating in the planned new annexes on:
  - Electric Scooters and Bicycles
  - Environmental Impacts
  - Hybrid and Electric Vehicles Powered by Renewable Energy
  - Heavy Duty Hybrid and Electric Vehicles and Public Transportation
  - Hybrid and Electric Vehicles in Developing Countries.

Please inform the Chairman or Secretary if you identify interested organizations.

- Inform the Chairman or Secretary whether you would be in favour of a “Virtual Working Week” or “Cyber Conference” in May 2000. You may wish to inform us of any practical concerns that you may have, problems that you foresee, and also whether the week of May 22-26 would be suitable for you.
- Arrange for your country’s contribution to the 1999 Annual Report to be written, as soon as you have received the guidelines from the Secretary.
- Reply to the survey on “Dissemination and Target Groups” when you receive it from the Secretary.
- As discussed at the meeting in Beijing, forward any suggestions you may have for modifications to the election procedures to the Secretary.
- As discussed in Beijing, inform Mr. Landwehr whether your country will participate in Annex 8 – Deployment Strategies, from the Hybrid and Electric Vehicle I/A or from the Advanced Motor Fuels I/A.

## APPENDIX 4 – ACTION ITEMS AND WORK PROGRAM FOR THE SECRETARY

### ACTION ITEMS:

Item No.	Priority	Target date or deadline	Status	Description	Comments
<b>ADMINISTRATIVE SUPPORT TO CHAIRMAN</b>					
1			completed	Edit the Oct. 25 letter from Urs Muntwyler	31-Oct-99 to do list
2			completed	Distribute the edited Oct. 25 letter from Urs.	31-Oct-99 to do list
3	11		to-do	Send the Oct. 25 letter to the participants in all the Annexes.	
4			completed	Reply to U. Muntwyler's letter of Nov. 8.	
5	18		to-do	Receive suggestions for the Index of the Annual Report from U. Muntwyler	
6	28		to-do	In consultation with the Chairman, select a special topic for the next Executive Committee meeting. Two suggestions are the OECD Transportation Policy (refer to Michael Landwehr) or Fuel Cell Vehicles (refer to Ballard)	Beijing ExCo meeting - action item
7			completed	Send letter head and business cards to Urs	Beijing meeting with Chairman and Deputy Chairman
8	12		to-do	Assist with the preparation of a draft strategy document	Beijing meeting with Chairman and Deputy Chairman
9	6		to-do	Ask O/As to put Urs and Arie on their distribution lists for Expert meetings	Beijing meeting with Chairman and Deputy Chairman
10		30-Oct-99	completed	Thank you letter to Mr. Vellone with certificate of appreciation	Draft time schedule by U. Muntwyler
<b>ADMINISTRATIVE SUPPORT TO DEPUTY CHAIRMAN</b>					
11	8		to-do	Send Arie the name of the Japanese Professor who was at the London EUWP meeting	Beijing meeting with Chairman and Deputy Chairman
<b>EXECUTIVE COMMITTEE MEETINGS</b>					
12	17		to-do	Expand the short report of the Executive Committee meeting in Kyong-ju, Korea, by adding the list of decisions made and action items	Beijing ExCo meeting - action item
13		31-Oct-99	completed	report on ExCo meeting in Beijing to all OA and ExCo members	Draft time schedule by U. Muntwyler
14	9		to-do	Thank you letters for Nov99 ExCo meeting	
15	10		to-do	Distribute the presentation about the Implementing Agreement made at EVS 16 to all ExCo members	Beijing ExCo meeting - action item

16	29	to-do	Present the audited financial report for the Common Fund for 1998-99 to ExCo	Beijing ExCo meeting - action item
17	30	to-do	ExCo meeting in Berlin in October/November 2001.	

### INCREASE PARTICIPATION IN THE AGREEMENT

18	19	to-do	take initiatives for "new countries"	31-Oct-99 to do list
19		completed	Ask agreement to visit DTI in the UK	31-Oct-99 to do list
20		completed	Reply to request from Russia to translate	
42		completed	Follow-up to Prof. Jun's e-mail	
22	20	to-do	Make a "How to convince your government" paper for enquiries about increased participation	Beijing meeting with Chairman and Deputy Chairman
23	16	to-do	Write a letter to EUWP member for Norway to ask who the contact should be	Beijing meeting with Chairman and Deputy Chairman
24	21	to-do	Find out about participation status of the Netherlands	
25		completed	Find out about participation status of Austria	
26	2	to-do	Reply to Ian Walkers enquiry about developing countries.	

### DISSEMINATION

27		completed	Distribute the Annual Report and the Summary Report	Beijing ExCo meeting - action item
28	15-Jan-00	completed	Produce the Newsletter	31-Oct-99 to do list
29		completed	Make up a time schedule for the production of the next Annual Report	Beijing meeting with Chairman and Deputy Chairman
30	1	1-Nov-99 to-do	Call for country status for the annual report for 1999 (final deadline 15th of January 2000	Draft time schedule by U. Muntwyler
31	22	to-do	Contact Thomas Fischer to jointly work out Dissemination Plan	Korea ExCo meeting - action item
32	23	to-do	Make arrangements for the design of a new logo.	Korea ExCo meeting - action item
33	15	to-do	Request ExCo members to provide their ideas on target groups and mailing lists	Korea ExCo meeting - action item
34	13	to-do	Prepare Internet web-site	
35	6-Jan-00	completed	Inform all O/A's about EVS 17 deadline for abstracts.	Beijing meeting with Chairman and Deputy Chairman
36	14	to-do	Look into possibility of a booth or table or special session at EVS-17	Beijing meeting with Chairman and Deputy Chairman
37	15-Jan-00	completed	Prepare my own abstract for EVS-17	
<b>ANNEX 1</b>				
38		completed	Prepare a covering letter for the distribution of the Annex I Summary Report which contains the conclusions of the Annex I Final Report. Then distribute the Summary Report	Beijing ExCo meeting - action item

			<b>ANNEX 2</b>	
39	24	to-do	Conduct a fax vote to formally close Annex 2 once the final financial reports are ready and once the Final Report has been distributed	Beijing ExCo meeting - action item
40	25 15-Nov-99	to-do	End of Annex II - end of term report - fax vote on financial account	Draft time schedule by U. Muntwyler
			<b>ANNEX 5</b>	
41	7	to-do	Copies of the Annex V Outlook report to Japan	
			<b>ANNEX 8</b>	
42	26 30-Nov-99	to-do	Conduct a fax vote to officially approve the text of Annex 8.	Beijing ExCo meeting - action item
			<b>COORDINATING COMMITTEE FOR TRANSPORTATION</b>	
43	27	to-do	Further describe the proposal to share the administrative costs of the CCT among the H&EV and AMF Implementing Agreements, and submit the proposals at a later time	Beijing ExCo meeting - action item
			<b>ADMINISTRATION AND FINANCE</b>	
44	3	to-do	Ask to O/As to provide me with address list of all the participants in their Annex.	
45	4	to-do	Make up "extended address list" of e-mail addresses, include all experts and also other transport related I/A's.	31-Oct-99 to do list
46	5		Send out remaining invoices for contributions to the Common Fund	
47		completed	Prepare Time Schedule	31-Oct-99 to do list
48		completed	Prepare a time-budget	Beijing meeting with Chairman and Deputy Chairman
49		completed	Give the time budget to ExCo members in the newsletter.	

**SCHEDULE AND TIME BUDGET:**

Month	Executive Committee	(30 days)	Dissemination Activities	(25 days)	Coordination among Annexes	(25 days)	Admin and Finance	(10 days)
Nov-99	Admin Support to Chairman	1	Distribution of Annual Report and Summary Report	4				
Dec-99	Admin Support to Chairman	2			Start up of Annex V and VIII	1	Collect Common Fund Contributions	2
Jan-00	Admin Support to Chairman Distribute EVS16 Present'n	3	Newsletter	3	Start up of Annex V and VIII	1	Routine admin and finance	0.6
Feb-00			Annual Report Survey of Target Groups	12	Fax Votes for Annexes II and VIII	2	Routine admin and finance	0.6
Mar-00	Paper for EVS 17 Minutes of Korea Meeting	2	Distribution of Annual Report - Internet Web Site	7			Routine admin and finance	0.6
Apr-00			Newsletter	3	Annex VII meeting in USA	4	Routine admin and finance	0.6
May-00	Virtual Work Week or Cyber Conference	3	Dissemination Strategy	2			Routine admin and finance	0.6
Jun-00	Fuel Cell Meeting in Berlin	2			Work shop for Fuel Cell Vehicle Annex	5	Routine admin and finance	0.6
Jul-00			Newsletter	3			Routine admin and finance	0.6
Aug-00	Preparation for ExCo meeting	1					Routine admin and finance	0.6
Sep-00	Preparation and briefing book for ExCo meeting	5					Routine admin and finance	0.6
Oct-00	ExCo meeting and report	7			Annex I meeting	2	Audit of annual financial report	2
Nov-00	Minutes and follow up to ExCo meeting	5					Routine admin and finance	0.6
Total		30		30		15		10