Minutes of the Start-up Meeting

Date: 10 June 2008
Time: 09 30 to 16 30
Venue: Zurich Switzerland
   Airport Conference Center, Room 802 8th floor

   For overseas colleagues a video-conference installation was available in the room (see list in Annex).
   Present: 15 persons representing 8 countries and one international association (5 of the participants were in the video link).

Distribution:
   Participants,
   ExCo (Ture Hammar, Hans-Paul Siderius), Peter Cunz IEA EUWP,
   Felix Frey SFOE,
   and other interested countries: Brazil, Canada, Finland, France, Korea, Sweden.

Goal: To advance the present 4E motor draft 3 so as to have a first group of participant countries agree on the overall scope, the general budget and the financing.
   Additionally it will be discussed and defined which participant wants to lead certain tasks and/or actively participate in certain task.

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1 Welcome, goal of the meeting, introduction to 4E

Roland Brüniger welcomes the participants in the room and online and thanks everybody for active cooperation in the Motor Systems Annex.

The IEA Implementing Agreement Efficient Electrical end-use equipment 4E has been officially launched at the Executive Committee (ExCo) meeting on the 14/15 April 2008 in Paris with Australia, Austria, Denmark, France, Korea, Netherlands, Switzerland and USA as starting members. Each participating country has to pay a general fee of € 10’000 per year for the general administration of 4E.

Furthermore the following countries (IEA members and non-members) will be invited to join: Belgium, Brazil, Canada, China, Finland, India, Japan, Mexico, South-Africa, Slovak Republic and the UK.

Industry participation is welcome. They have a set of special IEA rules to become IA members.

Ture Hammar (Denmark) and Hans-Paul Siderius (NL) act as intermediary chair and vice chair until formal elections will take place at the next ExCo meeting 23/24 October 2008 in Washington DC.

The following Annexes have been discussed so far:

- Mapping and Benchmarking (UK)
- Settop Boxes (USA)
- Motor Systems (Switzerland)
- Standby Power (Australia)
- Lighting (France)

The ExCo has been informed on the status of the MS annex and welcomes its well advanced stage and further development.

Switzerland is the lead country for the MS in the IEA 4E ExCo. Roland Brüniger is the ExCo Representative on behalf of the Swiss Federal Office of Energy (SFOE). Conrad U. Brunner with A+B International is the designated Operating Agent (OA) and has been already mandated by Switzerland for the whole preparation work for the MS Annex.

As each Annex has to be approved by the ExCo, it is the goal of today to develop the MS Annex further on to have a consistent description until end of September 2008. So it can be submitted to the ExCo for formal approval at the next ExCo meeting.

The 4E is now online with http://iea-4e.org and has its own logo, approved by the ExCo:

![4E Logo]

2 Introduction to Motor Systems Annex (draft 3)

Conrad U. Brunner explains the development of the work plan for the Motor Systems MS Annex (MS) so far. Initial interest for MS has been voiced by Australia, Austria, Denmark, Japan, Korea, Netherlands, South Africa, Switzerland and UK. Discussions are ongoing with Brazil, Canada, China, Finland, France, Sweden, USA, etc.

Industry participation is welcome in many of the tasks.

After preliminary versions a draft 3 (including the explicit comments received earlier form UK, Australia, Denmark and others) has been issued on 20 March 2008. It consists of a start-up phase in 2008 and a 5 year program for work from 2009 to 2013.
The MS Annex is also online with http://motor.iea-4e.org/

The draft consists of work in 9 tasks A to I (note: the term “sub-task” in the draft has been replaced by “tasks”). Due to feedback from participants and budget limitations the tasks F and H have not been activated so far. The entire MS Annex has a proposed total budget of 1.4 million € over 6 years.

| A | Implementation support |
| B | Consolidated motor database |
| C | Technical guide for motor systems |
| D | Testing centers |
| E | Instruments for coherent motor policy |
| F | Training & capacity building |
| G | Tools & guides |
| H | Energy management in industry |
| I | New motor technologies |

3 Discussion of draft 3, tasks A to I

The scope, timeline, budget and participation of the proposed tasks A to I were discussed individually. The following decisions were taken:

General:
All tasks leaders (see below point 4 of the agenda) should discuss with their participating countries and then propose a revised scope, work plan, timeline 2009 - 2013 and budget. Every task should determine whether to work on the level of:
- electric motors
- core motor systems (pumps, fans, compressors, mechanical traction)
- total motor systems

The task leaders are responsible for coordinating their work and for preparing work for dissemination (with respect to intellectual property of its origin). The revised work plan with scope, timeline, budget and deliverables will be coordinated into the overall MS plan. The task leaders form together with the OA and the country representative of Switzerland the Project Management Group.

The task leaders report continuously to the OA. The OA reports regularly to the ExCo.

All tasks share their information fully with MS members. External distribution of MS information has to respect intellectual property of the source.
Task A: Task A will make the results of MS available to all countries, especially in target economies. Industry support is welcome for the outreach (conferences, publications, etc.). Make the task work more explicit, concentrate on exterior communication (web, papers, conferences and workshops) and of dissemination of results from task B to I. Reduce budget due to better defined task leadership. Clearly distinguish OA activities and task A. Make task B a special item in task A.

Task B: The data requirements are defined by the necessary steering capability for the MS. Each MS-country can supply motor market data on a given format. The overall data from global markets are researched separately. The task B is introduced as a sub-task in task A.

Task C: Existing work from IEC 60034-31 and international MEPS guide can be used. Results from task I will be introduced here. Task G will be merged into task C.

Task D: Work is ongoing in the Asian Pacific Partnership (APP) with Australian leadership. Coordination with ongoing IEC round Robin is required.

Task E: Coordination maybe necessary with 4E Annex Mapping & Benchmarking. European (EuP), Australian and US policy implementation experience should be included. Cooperation with CLASP database (www.clasponline.org) is necessary.

Task F: Cooperation with industry is necessary.

Task G: Merge with task C.

Task H: Cooperation with ongoing UNIDO working group, ISO and European industry Energy Management standards.

Task I: Many countries are interested in feasibility and testing standards of new technology motors on the level of IE4, beyond fixed speed induction motor technology: Permanent magnet, switch reluctant and variable speed motors.

Additional tasks: UK proposes to introduce a new task to deal with total motor systems, testing standards for compressors and the like.

4 Task participation and leaders

The scope of each task and participation and leadership were discussed. The result of the discussion is shown in the matrix. Some countries (Japan, Denmark, etc.) have stipulated that their formal decisions will be taken later.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Countries</th>
</tr>
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<tbody>
<tr>
<td>OP</td>
<td>Operating Agent</td>
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<tr>
<td>TAB</td>
<td>Technical Advisory Board</td>
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<tr>
<td>A</td>
<td>Australia</td>
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<tr>
<td>B</td>
<td>Austria</td>
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<td>C</td>
<td>Brazil</td>
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<td>D</td>
<td>Canada</td>
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<td>E</td>
<td>Denmark</td>
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<td>F</td>
<td>Brazil</td>
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<td>G</td>
<td>Japan</td>
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<td>H</td>
<td>Korea</td>
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<td>L</td>
<td>Spain</td>
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<tr>
<td>M</td>
<td>Switzerland</td>
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<tr>
<td>N</td>
<td>UK</td>
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<tr>
<td>O</td>
<td>USA</td>
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<tr>
<td>P</td>
<td>ICA</td>
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<tr>
<td>new</td>
<td>Total motor systems integration (UK proposal)</td>
</tr>
</tbody>
</table>

Participant in Task
Task leader
For the moment the following task leaders are nominated to prepare the revised task papers:

- A Switzerland (OA)
- C Denmark
- D Australia
- E Australia and Austria (co task leaders)
- F Denmark
- H Netherlands
- I UK
- J UK

5 Revised budget proposal

The general budget items (TAB, OA and task A) were considered to high with respect to the overall work in the tasks. The proposed budget item for a Technical Advisory Board was eliminated. The other two general budget items should be defined in a more transparent way for the tasks of the Operating Agent, the task leaders and the new defined task A.

The procedure for the definition of the revised budget and financing proposals are now as follows:

1. Task leaders: Define the task A to J work, timeline and budgets (in kind and cash);
2. OA: Defines the general budget items (OA, task A);
3. OA: Integrates the different tasks and the general budget (in kind work and cash) and sends out for review;
4. Participating countries: Explore the funding possibilities (flat entry fee per country participating in MS, plus task dependent fee and in kind contributions). Decide on immediate funds for 2008/09 and subsequent financial planning (please notify special fiscal years).

6 Financial scheme (in kind, cash)

After intensive discussions the following general conclusions for the financial scheme of MS have been drawn. The financial scheme is based on now 6 to 8 (later up to 12) participating countries (plus industry organizations) and will be structured as follows:

Each country has to secure first its formal membership in the IEA Implementing Agreement 4E and pay its annual fee (€ 10’000).

Each country (or industry) willing to work in MS Annex should decide formally to do so and to notify the OA by 15 September 2008. It shall dedicate several means of support to the MS:

In kind:
- National resources: Research results, reports on best practice experiences and policy should be shared and made available to all MS participants. Available national market studies on motor production, import/export, share of IE3 and IE2 shall be provided to the MS.
- Qualified staff: Countries shall designate capable persons for attending international meetings (online and twice a year in person) and available capacity for necessary work. Also experienced and dedicated staff for task leadership shall be nominated.
- In kind work applies only to work specifically dedicated to the MS within its general scope and as part of the deliverables of the respective tasks. It must be additional work otherwise not undertaken.

Cash:
- Flat fee for all countries for MS membership (a € 10’000 minimum fee per year has been discussed, to be decided later).
- Additional fees depending on type and number of participation in tasks, task leadership, and also of size of country (GDP or other scale), available national budgets and in kind contribution. Amount and distribution has not been discussed yet.
Appropriate funding mechanisms have to be determined for industry, associations and NGO.

The financial scheme will be developed as soon as the next draft MS project is available and its budget is approved. It will follow the basic IEA rules set in the Implementing Agreement 4E.

7 Kick-off at Motor Summit 08: Side event on 24 November 2008

Invitation for the Motor Summit 2008 from 24 to 26 November 2008 in Zurich.

Program and registration is online at http://motor.iea-4e.org.

A special side event will be dedicated for the next MS meeting on 24 November 2008.

8 Time line and Next steps

The MS shall be officially discussed and decided at the next ExCo meeting in October 2008.

We therefore propose the following sequence of preparation:

- New task description by task leaders 15 July 2008 (sent to OA)
- Integrated new MS proposal (draft) 31 August 2008 (sent to all members for comments)
- Deadline for comments on new MS 15 September 2008 (sent to OA)
- Approved new proposal, budget and financing 30 September 2008
- MS project submission to ExCo 1 October 2008
- ExCo decision on MS 23/24 October 2008
- Formal MS project start 1 November 2008

To do list:

**All countries**

- Designate national contact person and institution for MS
- Decide formally on MS participation
- Decide on active participation in tasks and task leadership
- Decide on funding possibilities 2008 to 2013
- Decide on formal 4E participation (if not done yet)

**Task leaders**

- Task description on standard format (see separate attachment)
- Brüniger
  - Informs industry on specific IEA rules for participation
  - Informs new possible members of IEA 4E of necessary formal steps (with support of IEA)
  - Ask IEA for a short description of how the funding procedure in an Annex has to be handled
Brunner 
Minutes 
Format for task description (see separate attachment) 
Plan of task A 
Deliverables and budget for OA 
Draft new MS proposal: Integration of tasks B to J and overall project plan (scope, timeline, budget, financing) 

9 List of participants 

<table>
<thead>
<tr>
<th>Country (Organization)</th>
<th>First name</th>
<th>Last name</th>
<th>Affiliation</th>
<th>Contact info email</th>
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<td>Hugh</td>
<td>Falkner</td>
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10 Separate Annex 

- Slides of the meeting (pdf) 
- Format for task description (Word)