

**International Energy Agency  
Solar Heating & Cooling Programme  
Task 24  
Active Solar Procurement**

**WORKSHOP  
Gothenburg, Sweden  
17-19 September 1997**

**MINUTES OF MEETING**

**Hans Westling  
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Task Organiser**

International Energy Agency  
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## **TASK 24 “ACTIVE SOLAR PROCUREMENT”**

**Minutes from Workshop 17-19 September 1997, Gothenburg, Sweden**

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Hans Westling  
17 October 1997

## **TASK 24 “ACTIVE SOLAR PROCUREMENT”**

### **MINUTES FROM WORKSHOP 17-19 SEPTEMBER 1997, GOTHENBURG, SWEDEN**

#### **1. INTRODUCTION AND PRESENTATION**

##### **1.1 Welcome**

Jan-Olof Dalenbäck welcomed the participants to the meeting, which was held at Chalmers University of Technology in Gothenburg - on 17th September in the building “Installationsteknik”, and on 18th and 19th September in the Chalmers Conference Centre because of a public dissertation which changed the possibilities for “Installationsteknik” to host the meeting during the whole conference period. Before the proper meeting started, there was a study tour to some solar projects in the neighbouring town of Kungsbacka.

##### **1.2 Presentation of persons present**

All the participants, who are listed below, gave a short presentation of their background. As to their organisation and addresses, see List of Participants, Appendix 1.

Roy Blower	(17-19)	Jan Erik Nielsen	(17-19)
Lex Bosselaar	(17-18)	Michael Noble	(17-19)
Jan-Olof Dalenbäck	(part of conference)	Peter Out	(17-19)
Ueli Frey	(18)	Michael Rantil	(17-18)
J-C Hadorn	(18)	Bengt Ridell	(17-19)
Lisbet Holst	(17-19)	Alison Wilshaw	(17-19)
Hans Isaksson	(17)	Jens Windeleff	(17-18)
Peter Kroon	(17-19)	Heimo Zinko	(17-19)
Philip Mann	(17)	Hans Westling	(17-19)

## **2. DECISION ON AGENDA**

An amended Agenda had been sent out by fax to the participants some days before the meeting. The reason for the amendment was to consider wishes expressed by some of the participants.

The amended Agenda included work until 3 p.m. on Friday, 19th September. In order to comply with the wishes of some Working Group members, concentration would be made on all the key and principal issues, so that they could be solved during the 17th and 18th of September. With this amendment, the Preliminary Agenda, Appendix 2, was approved in principle.

## **3. PURPOSE OF THE WORKING GROUP MEETING**

The purpose of the Working Group meeting was to solve the major principal problems, and in particular to concentrate on the Task Text, and if possible also on the Work Plan. These documents should be further discussed among the members of the Working Group before sending them to the Executive Committee members. The intention was to include also the findings from this meeting in the present drafts.

The material discussed at the meeting included:

- Documentation for the meeting, which had been sent out about 12 days before the meeting to the participants and all persons on the Solar Procurement Distribution List
- Minutes of the meeting in Vejle, Denmark, 15-16 May 1997

Draft versions (dated 3 September 1997) of the Task Text and Work Plan were included in the documentation for the meeting. In these documents, remarks from last meeting with the Working Group and comments received at the Executive Committee Meeting in Oslo, had been incorporated.

## **4. SUMMARY BROCHURE**

Philip Mann presented a revised draft Summary Brochure (with another illustration/picture on the front page). Comments on earlier drafts received from several Working Group members had been incorporated in this revised draft. It was decided that Philip Mann would try to find less “concrete” pictures for the front page. The front page should however show thermal solar projects, perhaps a “collage” of four pictures, if possible from different

countries. At least one of the pictures should be of a single-family house.

It was stressed that advantages other than cost and price should be included in the text, and the added value should also be stressed.

It was decided to check that the references were correct and complied with the numbers mentioned in the text. Jan-Erik Nielsen also suggested that the authors of the background material, used in the Summary Brochure, would be mentioned with their names and organisations, in one way or another. During the following week - until 26th September, at the latest - the participants had also the possibility of sending in some final suggestions about changes. After that, the Summary Brochure would be printed, subject to approval by the Chairman of the IEA Solar Heating & Cooling Agreement.

The number of brochures to be printed was discussed, and a suggestion was shown by Philip Mann. It was decided to print a total of 4,000 brochures.

One person should be nominated in each country to take care of the distribution in the country concerned. If not otherwise mentioned, it will be the contact person in the National CADDET Team.

*Addendum:*

Later, comments have been received from the Executive Secretary of the IEA Solar Heating & Cooling Agreement with reference to decisions. These comments are mainly of a formal character, e.g. to include in the references the name and address of the Chairman of the Executive Committee, and that this proposed Task is the result of a decision in the Agreement.

The final draft, "Large-Scale Solar Purchasing - A business opportunity", Appendix 3, will be printed at the end of November. Two more illustrations with single-family houses are lacking.

## **5. FULL BACKGROUND REPORTS**

These reports were now ready in principle. Some of them were presented in final drafts at the meeting and handed over to the participants. Others will be ready during week 38.

Philip Mann presented time schedules for the work on the Summary Brochure and the reports, see Appendix 4.

## **6. REMAINING ACTIVITIES FOR INFORMATION**

Philip Mann mentioned the possibility of having a web site for the information with suitable links to national data bases, etc. This will be discussed at future meetings.

## **7. PAMPHLET BROCHURE AND MODEL LETTER**

Hans Westling informed about the Model Letter, which should be regarded as a basis for national letters. The different countries are free to take whatever they wish of the arguments included in the Model Letter for their national letter, which, of course, would be written in the language used in the country in question. The purpose of such letters is to raise interest, especially among buyers, such as utilities, housing companies, developers, etc.

It was further decided that it is not regarded necessary to have an additional pamphlet brochure in the present circumstances.

## **8. TASK TEXT PRESENTATION**

Hans Westling made a presentation of the new Task Text (draft dated 3 September 1997) by overhead pictures and stressed that this information material is on computer and can easily be changed according to the discussions at this meeting. Hans Westling also referred to the draft Work Plan, which had been drawn up according to the SHC Policy and Procedures and with the Work Plan of Task 23 "Optimization of Solar Energy Use in Large Buildings" of April 1997 as a model. As can be seen from this document, a number of Subtasks have been used, and this has been a model for the draft Task 24 Work Plan.

## **9. TESTING**

Jan-Olof Dalenbäck introduced the material that had been sent out with a fax letter, dated 11.09.1997, from Dirk Mangold, see [Appendix 5](#).

The testing procedures are not mandatory, but it was discussed whether to have mandatory testing for collectors in this project. More work should be done regarding testing procedures, especially in respect of varying angles for the radiation. It may be tricky to make comparisons between testing models and actually installed systems.

## **10. DISCUSSION ABOUT THE OVERALL WORK METHOD OF THE PROJECT**

Hans Westling stressed that the Task Text now shows a more open possibility of working with different national procurements, and later on having an increasing degree of coordination in respect of timing, principles for the requirements, etc.

## **11. BUYER-DRIVEN SOLAR PROJECT**

Hans Isaksson informed about the project carried out by Vattenfall in Sweden, see [Appendix 6](#). This project includes a combination of measures and also an innovation with pump circulation without electricity. There are already 10-12 different buyers involved in the project, which includes both housing and commercial buildings. The participants pay SEK 20,000 per organisation and year to participate, and there are mainly task-sharing activities.

## **12. DISCUSSION ABOUT THE TASK TEXT PRINCIPLES**

The following sections 12 and 13 summarise the discussions. The actual revised formulations were written down and have been included/further developed in the documents dated 16 October 1997.

This can be of value during the future planning of the work.

Roy Blower stressed that collaborative work is good in principle, especially for international buying of *components*. It is, anyhow, an order in the magnitude of 10,000 *systems*. Even 1,000 systems are, for the time being, premature for the United Kingdom. Another thing that was stressed was innovative financial suggestions. It is an overall agreement that it is of value to form some sort of collaborative work to motivate formation of buyer groups. There may be different wordings about performance and price (increases and decreases, respectively) that have to be worked on. It may also be difficult to define one cost/price level, as the levels vary between different countries and different projects.

Jens Windeleff supported the creation of tools and suggested that more about all sorts of “systematic sales” should be added. The “Book of Tools” is not only intended for facilitating the creation of buyer groups, but also for offering procurement and promotion examples and methods to buyer groups,

which sometimes already exist and are organised. Lex Bosselaar stressed the importance of working from a smaller scale to a larger scale in order to “get going” very soon, and to use smaller projects that are more realisable. Also financial arrangements with “green banking” should be included. The choice for buyers and users should also be kept. There could also be a presentation of three successful tenderers. We should not give everything to one winner.

The possibility of having some sort of *promotion label* was also discussed. Hans Westling suggested that “the IEA Solar Heating & Cooling Award of Excellence” could be used for the following years by companies that had received this award after analysis of their written material and testing of their prototypes. An alternative way could be to use the *first two years to start up the collaborative activities in small projects* and try to have some degree of collaboration - for example in respect of the time for launching and the principles for the requirements -, and include in the Task Text a *planned Second Round with larger projects and a larger degree of international collaboration*. This Second Round should then be the subject of evaluation of the Task during a third year.

It was also stressed that “10,000 extra systems” do not mean the same in every country, and therefore also the corresponding *square metres of collector area* should be given. Michael Rantil stressed that it is important to *show* in this activity that it is possible to *organise large procurement activities*, and in this way influence the whole market.

It was suggested that this Task be organised in *two main blocks of activities*:

1. organisation of buyer groups, and actual procurement;
2. work on the “Book of Tools”, where principles from the draft versions of the “Book of Tools” could be used for early procurements. The “Book of Tools” could then be subject to yearly updating.

It was also stressed that it may be an advantage not to have too many Subtasks, as this could lead to too many milestones and detailed results to be reported to the Executive Committee meetings. It is better to have larger blocks of activities and to call them “Subtasks”. In this way, the whole Task work would be freer.

In the “Book of Tools” it would be a good thing to include *standardised ways of fair tendering, technical principles* and also to include *many alternatives* and work with tendering documents. This work could then be started in parallel, as it takes time to organise buyer groups, also for the smaller projects, since you may have to include - as already presented in the draft Task Text and Work Plan - identification of buyer groups, information

to the potential buyers, and then the formal organising of the groups. From the United Kingdom it was stressed that it is important to activate the “*high-profile buyers*”, and to have them increase the activities. This would then have an influence on the many small buyers. It was agreed that this could make the market bigger and more international.

Jan-Erik Nielsen emphasised that the activity should not result in too small groups, and that it is important to raise the awareness among both suppliers and buyers. It should also be mentioned that it was agreed not to exclude the possibility of requesting tenders also from component manufacturers. It should be possible to include both new houses and existing houses. From some countries it was pointed out that installation is complicated and expensive, and also that the whole marketing costs a lot of money and is inefficient. On the other hand, it has been shown that, when there are a number of coordinated projects which have been well prepared, two persons can do the whole installation during a couple of hours.

All participants agreed that it is important to come up with *specification principles*, and then it would be up to the buyers to finally influence and decide on the formulation of requirements and the way of procurement.

### **13. DETAILED DISCUSSIONS ABOUT THE FORMULATION OF THE TASK TEXT AND WORK PLAN**

The present versions of the Task Text and Work Plan were discussed and preparation were made as group work. It was agreed to include the different new texts, drawn up in the groups, in the revised Task Text. Some of the participants stressed the importance of the Task as a “learning process”.

Two principal areas could be illustrated:

- *External activities*, which are procurement, formation of buyer groups, some dialogue and promotion (Subtask 1); and
- *Internal activities*, which are the work on the tools and models for sales (Subtask 2).

It was also decided that the whole Task project with *two rounds* would be *five years* after the first year, the Project Definition Phase. It is important to formulate acceptable levels of requirements and also to set up the whole project in such a way that it is possible to manage. “High level of flexibility” should also be included, and that the buyer groups must have a choice between solutions.

The Second Round should just be shown in principle. The concrete organisation could be divided into regional projects with a couple of countries collaborating, for instance the United States and Canada, North European countries, and South-European countries.

The possibility of including plans for *workshops and conferences* should be included. Results and milestones could be *reports* and, if possible, the *actual changing of the market*.

It is very difficult to *measure the awareness among the fragmented buyers*, so this should be avoided. It is better if there could be *interviews with organisations earlier in the chain*, e.g. “number of questions or calls to different suppliers” - before and after the Task activities.

It could be a good thing to include in the “Book of Tools” *case studies*, to learn about the *marketing*, and how to facilitate *market acceptance*. An *organisation chart* could be of value to include.

The time schedule should show *contacts with the industry*. There should also be tendering forms and procedures and a catalogue with procurement examples and other promotional activities. Different ways of tendering could be customer-based and component-based. There are large problems to overcome.

The possibilities of receiving part-financing from the European Commission THERMIE programme should also be investigated.

This innovative effort includes much more than only development.

We should also try to continue the information work through CADDET, as they already have good information channels.

Among the buyers we should include hotel chains and developers, and also self-building groups.

One question for later consideration was whether we should *only allow utilities from the participating countries* to join, or if this activity would be open also to others. Another thing to consider was the last date for joining the Task.

We should open up for combinations with other energy sources, like gas.

We must show the value of the annual costs.

National Participation Plans should later be prepared by the individual countries.

We should also include the “*Award of Excellence*” and perhaps the special logotype.

The principle development of awareness was shown by means of a curve by Michael Noble, Appendix 7, (going from “unaware”, over “starting to increase”, to becoming “loyal buyer”).

Some of the results are the “Book of Tools” and also the different included forms, the updating of the “Book of Tools”, and the set of procedures.

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Within the group work for the different Subtasks, the total efforts for work within the Subtasks was roughly and preliminary summarised to between 5.5 - 7 person-months per country and year in the coming years. There would be an additional share for the effort of the Operating Agent, depending on the number of participating countries.

Different levels of efforts and alternatives for cost- och task-sharing would be possible, and will be discussed informally between Executive Committee members in interested countries.

Identification was made about the interest in the Task among the participating countries.

Peter Out would revert with a revised Detailed Time Schedule the week after the workshop (week 39).

*Addendum:*

The documents have been further elaborated. A booklet “Proposal for a New Task”, dated 16 October 1997, including Annex Description and Work Plan, has been distributed to the Executive Committee members and Task 24 Working Group members.

## **14. NEXT MEETING**

Next Working Group meeting was preliminary set to *15-16 January 1998*. This meeting would be the actual start of this Task - if the Executive Committee decides to start the project and enough countries join - or an additional preparatory Working Group meeting .

## **APPENDICES**

- Appendix 1 List of Participants, revised 6 October 1997
- Appendix 2 Preliminary Agenda for the meeting, revised 15 September 1997
- Appendix 3 “Large-Scale Solar Purchasing - A business opportunity”, Summary Brochure, final draft October 1997
- Appendix 4 “Summary Brochure Timescale” and “Report Timescale”, September 15, 1997, Philip Mann.
- Appendix 5 “CEN Standards for Solar Heating Systems - an Overview”, prepared by Dirk Mangold, 11 September 1997.
- Appendix 6 Buyer-Driven Solar Project: Copies of overhead material presented at the meeting by Hans Isaksson.
- Appendix 7 “Adoption Curve: Market Growth through Commercialization”, presented by Michael Noble.
- Appendix 8 Solar Procurement Working Group Distribution List, updated 20 October 1997.

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Attached separately:

“Solar Update”, Newsletter of the International Energy Agency Solar Heating and Cooling Programme, No. 29, August 1997.

## **DISTRIBUTION**

These Minutes are distributed to the participants of the meeting and to the persons included on the Active Solar Procurement Distribution List, Appendix 8.