International Energy Agency Solar Heating & Cooling Programme

TASK 24 SOLAR PROCUREMENT

EXPERTS MEETING

Lucerne, Switzerland 2 – 4 October 2000

MINUTES OF MEETING

Hans Westling Promandat AB Operating Agent

International Energy Agency Solar Heating & Cooling Programme

TASK 24 SOLAR PROCUREMENT

EXPERTS MEETING

Lucerne, Switzerland 2 – 4 October 2000

MINUTES OF MEETING

Hans Westling Promandat AB Operating Agent

For further information please contact Hans Westling, Task 24 Operating Agent. Address: Promandat AB, P.O. Box 24205, SE-104 51 Stockholm, Sweden. Phone: +46-8-667 80 20. Fax: 46-8-660 54 82. E-mail: hans.westling@promandat.se

TASK 24 SOLAR PROCUREMENT Minutes of Experts Meeting 2 – 4 October 2000, Lucerne, Switzerland

CONTENTS

1 1.1 1.2	INTRODUCTION AND PRESENTATION OF PERSONS PRESENT	1
2	APPROVAL OF AGENDA	1
3	MINUTES OF EXPERTS MEETING IN OTTAWA, CANADA, FEBRUARY 28 MARCH 1, 2000	
4	PARTICIPATION PLANS	2
5	EFFORTS FOR RAISING INTEREST IN PARTICIPATING IN TASK 24	2
6	SUBTASK A "PROCUREMENT AND MARKETING"	3
6.1	Presentation of the work	3
6.2	The Netherlands	4
6.3	Denmark	
6.4	Sweden	
6.5	Switzerland.	
6.6	Canada	
6.7	Summary	
7	GROUP WORK	7
7.1	Medium-sized systems	7
7.2	Tendering	8
7.3	Small systems	8
7.4	Other discussion items	
7.5	Decisions.	
8.	SUBTASK B "CREATION OF TOOLS"	9
9.	CONTACTS WITH SUPPLIERS	10
10	MIDTERM EVALUATION OF TASK 24	11
11.	STUDY TOUR	11
12.	THE IEA TASK 24 WORKSHOP	11
13.	TIME SCHEDULE AND TASK STATUS REPORT	11
14.	POSSIBLE IEA SHC AWARD OF EXCELLENCE.	12
15	MARKET UPGRADING AND PURCHASE CRITERIA	13

16	GENERAL INFORMATION ACTIVITIES FOR TASK 24	14
16.1	Sources for additional funding	14
	Calendar for Solar buyer group events in the future	
16.3	Task 24 Newsletter	14
	The OPET network	
16.5	Web links	14
17	MATTERS FOR EXECUTIVE COMMITTEE CONSIDERATION	15
18	CHECKLIST OF ACTIONS	15
19	SCHEDULE FOR FUTURE TASK 24 EXPERTS MEETINGS	15
20	CONCLUSIONS AND THANKS	15
APP	ENDICES	15
DIST	TRIBUTION	17

Hans Westling 30 October 2000

MINUTES OF TASK 24 "SOLAR PROCUREMENT" EXPERTS MEETING IN LUCERNE, SWITZERLAND, 2 - 4 OCTOBER 2000

1. INTRODUCTION AND PRESENTATION OF PERSONS PRESENT

1.1 Introduction

The Operating Agent Hans Westling opened the Task 24 Experts Meeting. Christian Völlmin welcomed all the participants to Switzerland and to Lucerne, and he hoped it would be a fruitful meeting.

1.2 Presentation of persons present

Persons present were:

Klaus Ellehauge Danish Technological Institute, Denmark
Lotte Gramkow Esbensen Consultants A/S, Denmark
Hans Isaksson K-Konsult Stockholm, Sweden
Björn Johansson AB Enköpings Värmeverk, Sweden

Ruth Koch BMP Sanitär und Energie, Switzerland (part of the time)

Matti Nordenström MAV, Sweden

Iben Østergaard Danish Technological Institute, Denmark

Peter Out Ecofys, The Netherlands

Markus Portmann
Gerald Van Decker
BMP Sanitär und Energie, Switzerland
RenewABILITY Energy Inc., Canada

Christian Völlmin SSES, Swiss Solar Energy Society, Switzerland

Heimo Zinko ZW Energiteknik AB, Sweden

Urs Wolfer Federal Office of Energy, Switzerland Hans Westling Operating Agent, Promandat AB, Sweden

A short presentation of the persons present followed. For further details and addresses see the Task 24 Address List, which was circulated for updating during the meeting, <u>Appendix 1</u>.

2. APPROVAL OF AGENDA

A draft Preliminary Agenda dated 17 September 2000 had been sent by e-mail to the Experts and was included in the pre-meeting documentation (Appendix 2). In the Preliminary Agenda, time had been set aside for a study tour to a producer of hot water storage tanks on the first day of the meeting, and on the second day for a workshop with exchange of experience and

presentations from the international and Swiss delegations, including manufacturers and installers in Switzerland.

It was agreed to change the Agenda and to have the national presentations from the countries already after item No. 6 in order to give a joint background, which was thought to be fruitful for the following working group sessions. This could also be streamlined to the actual situation and to the needs. With this change, the Agenda was approved.

3. MINUTES OF EXPERTS MEETING IN OTTAWA, CANADA, FEBRUARY 28 - MARCH 1, 2000

The Minutes had been distributed in April, and were approved by the participating Experts.

4. PARTICIPATION PLANS

Adrie van de Water, *The Netherlands*, had informed in a mail 11 September that he would shift from solar energy to activities in energy saving within the field of electronic equipment. The Netherlands will come back about a possible new Expert in exchange for Mr. van de Water.

Gerald Van Decker, *Canada*, had also informed by e-mail 21 July that he no longer is working for CANMET/National Resources, Canada, but in his own company. Canada will inform about how the situation will be in the future.

The different countries informed about the actual *funding situation* of the task-sharing parts. In some countries, there has been a delay in receiving the final decision about the funding. In some countries, the funding is coming from two or several different organisations, which needs some extra co-ordination efforts. In some cases, there are also a fairly low level for the funding of the task-sharing efforts. During the coming Executive Committee Meeting, the Operating Agent will raise this matter in an informal way with the country representatives in question.

The referendum in Switzerland in September went unfortunately the wrong way from the point of view of solar energy. One of the questions were: Will the Swiss population support renewable energy by paying 0.003 Swiss Franc per kWh on non renewables? A majority of 55% were against and 45% were in favour. If the referendum had not been lost, it would have facilitated more subsidies and programmes for renewables, including solar energy. However, there is no problem for financing the agreed level of efforts from Switzerland.

5. EFFORTS FOR RAISING INTEREST IN PARTICIPATION IN TASK 24

At the last Experts meeting, some countries were identified and would be approached about participation in Task 24. It was informed that in addition to those countries, *Finland* was interested and had received information about Task 24. Finland is now considering joining Task 24. They had also planned to participate with an observer in this Experts Meeting, but unfortunately it was not possible for the national specialist to participate.

Another country where there is a great probability for future joining is *Belgium*. Peter Out has already started some collaborative efforts, and is optimistic about Belgium's joining Task 24.

The pre-meeting documentation included also correspondence with some other interested countries. Hans Westling had also approached both *Germany* and *Austria* in connection with the "Gleisdorf Solar 2000 Symposium". It seems to be some resistance from the organisations of manufacturers and that is the crucial point. In *Germany*, there is a large campaign "Solar Na Klar" and a similar campaign is ongoing in *Austria*. The opinion is that there is no need for additional international actions. In *Germany*, there is a very large initiative also for buying all electricity produced by PV with a very high price compensation.

Peter Out will follow up on *Belgium*, and also on *Germany*.

In *France*, they are looking at the development in Belgium, which might influence their future decision.

Gerald Van Decker will follow up on the *United States'* decision.

6. SUBTASK A "PROCUREMENT AND MARKETING" – SHORT INFORMATION ABOUT NATIONAL ACTIVITIES

6.1 Presentation of the work

As Subtask A Leader, Peter Out started this presentation and would later summarise the findings from the other presentations, and from the following working group activities.

Overviews of all the National Projects (updated 8 November 2000) are included in <u>Appendix 3</u>.

Peter Out stated that the initiation of the *Midterm Evaluation* would also have to be discussed. We should form a background for a "go/no-go"-decision for the Executive Committee to be discussed at the first Experts Meeting in 2001. Possible synergy and formalisation are items especially important to discuss here. (See further under section 10, Midterm evaluation of Task 24, below).

It could also be of special interest to form a European solar water heater products and services activity for housing associations. Peter Out invited the other countries to join the Dutch "Space for Solar" activity (see further below). The intention is also in an international tender to include complete systems, including installation, and to have a very uncomplicated pricing per square metre for putting them into existing buildings. This could be for medium-sized systems between 15-100 m². Information about this would have to be inserted in the "Official Journal of the European Communities" and other similar media.

6.2 The Netherlands

Peter Out referred to the Overview of National Projects for The Netherlands (see <u>Appendix 3</u>) and gave a presentation of the ongoing work, see <u>Appendix 4</u>. The Overview for The Netherlands included the "Space for Solar", "Solar energy in the ESSENT supply region", "Solhas", "SOL*id", the "WWF (World Wildlife Fund)" and the "ASN" projects.

In The Netherlands there are solar water heater campaigns going with buyer groups for *domestic systems* in existing dwellings and new housing developments.

The campaigns for existing dwellings include: "SOL*id", ASN Bank and WWF. The "Solhas" European survey has started together with the Dutch umbrella organisation of all housing associations, "Aedes", and the European counterpart "Cecodhas". There are enquiries, procedures to approach the housing association sector, branch organisations, and housing associations, such as the housing associations in the EDON supply region

For new housing developments, contacts have been taken with the Essent utility for activities with property developers and housing associations in the Essent supply region. The project is running with a project group in order to identify projects and to have national tendering, which would include consulting architects and constructors.

For *medium-sized systems*, the "Space for Solar" initiative has 59 participants and about 100 projects with about 20,000 m². There is an open character with various solar services. Peter Out also invited the other Task 24 participating countries to join the "Space for Solar" as a synergy proposal. This would avoid double work, speed up the time and be more economical. It would then be a real international dimension for the Task 24 with a large buyer group power. An international tender could be in October-November 2001 at the earliest, perhaps later, and include 10,000 m², standard dimensions in tools and quality control.

Peter Out also informed about the *Belgium participation in the "Soltherm Programme*" in the Walloon parts of Belgium. This is a government programme, which has the goal of 50,000 systems until the year 2010, and 3,000 until the year 2002. It includes quality controls, subsidies and promotion. There will be procurements for the social housing sector in 2001 and 2002.

6.3 Denmark

Lotte Gramkow informed about the activities in Denmark, see <u>Appendix 5</u>. Originally, Denmark had had a very broad approach, and the lesson learned was to target more specifically. The new approach is to contact specific potential buyers.

Contacts had earlier been taken with the electric utility companies Thy Højspændingsværk and Morsø Elforsyning, having altogether 28,000 customers. They had an image task to fulfil and were very positive. They intended to sell the systems based on price negotiations with suppliers and installers. The campaign "Sol over Thy and Mors" was started in May and is now running. Up to now, 15 systems altogether have been sold (eight 12 m²-systems, six 8 m²-systems and one system of 6 m²) which would correspond to about 25 small-size systems. Fifty customers have shown an interest in the campaign and about 25 have expressed a

specific interest in having a solar system. The Thy and Morsø utilities expect to sell 25 systems before Christmas. The campaign is expected to run a bit in 2001 too, but it has not yet been decided exactly for how long. Attached is the text from an article (in Danish) which has been inserted in some of the local papers in the Thy and Morsø areas, Appendix 6.

In the private company Rockwool, there was a commitment from the individuals but not from the management, so therefore the activity could not be followed up.

The housing developers KFS-Houses, building about 50 houses in north Jutland (originally reported to be 500), stressed that it would be a domino effect if they started. This should not be a real procurement project since they wanted to get the systems from a local supplier. Will help setting up the formalities, but this will now be another Danish agency project, not a Task 24 project.

Contacts had earlier been taken with FDB Supermarkets - a co-operative society of five supermarket chains, owned by the members (1.3 million in total). They wanted the individual shops to sell directly to the customers. However, the managers of each individual shop do not have any knowledge of solar heating.

Denmark had printed a brochure (in Danish) in order to facilitate contacts, Appendix 7.

Contacts had now been taken with a large franchise food company, the WWF (World Wildlife Foundation) and the Danish Nature Conservation Foundation, but there are no concrete projects yet.

"Green" municipalities had also been approached. They are however mostly located in combined heating power plant areas, as there is no government support to solar systems.

Denmark will continue their contacts with Kommunernes Landsforening (the Danish organisation of municipalities), Greenpeace Denmark and also with the Dansk VVS (the Danish association of plumbers with 35 installers and 6 suppliers). The goal is to install 30-40 systems per year and installer.

Denmark is now striving to identify a real good project.

A previous solar water heating campaign in Denmark with the National Gas Company was quite successful and about 2,500 systems were sold. There is also an initiative with "Sun and Wood" which is in its starting phase. Until now, 100 systems have been sold. Other campaigns include:

- Sun and biomass in sparsely built up areas, which started in 1996.
- Solar systems sold by a local electricity company, ENCON.
- Campaigns from the Danish Association of Plumbers.
- Campaigns from the Danish Solar Manufacturing companies.

6.4 Sweden

Hans Isaksson and Matti Nordenström informed about the activities in Sweden. Two buyer groups had been formed: one for larger systems and one for smaller, single-family house systems.

For the *larger systems* (10,000 m²), some promising proposals have been received. These are now being studied in detail in order to clarify and come to a final decision, hopefully in November, and to start deliveries at the turn of the year.

For the *smaller systems* (1,000-2,000 systems and between 5,000-10,000 m²), there was a large interest and a number of prototype tenders were received. The prototypes have been tested at the official testing laboratory in Sweden. The material is now being studied in detail with the intention to finalise the work and have a framework contract signed before the end of October.

A copy of the interest application form for smaller systems (in Swedish) is attached as <u>Appendix 8</u>.

Sweden is studying the points of contacts between manufacturers and distributors, between distributors and installers, and between installers and buyers in order to smoothen these contacts. The intention is also to see that there is a full price for the delivery of the system, which should be 16,000 SEK, to which sum should be added about 5,000 SEK for the installation, which means a total of 21,000 SEK. From this sum (21,000 SEK) a subsidy of 5,000 SEK will be deducted. The total cost is then 16,000 SEK. This should be compared to the situation when a new electric heater must be bought, which costs about 11,000 SEK. This results then in a remaining difference of only 5,000 SEK.

The intention in Sweden is also to have a number of advisors, who will give advise by phone to larger clusters of buyers. The actual projects will also be visited.

In the discussion, it was mentioned that there had been contacts with McDonald's, both in Sweden and in Finland, and it could be of interest to follow up these contacts. It would be combined solar technology with heat recovery. Here, there would be a need for using high level persons and repeated actions.

6.5 Switzerland

Christian Völlmin and Markus Portmann informed about the situation in Switzerland after the referendum. It has "taken this week to mourn about the loss"! Anyhow, it seems to be possible to continue with the SSES virtual buyer group, which is one of the initiatives. In the "Passive Houses in Senti Kriens" project, the invitation to tender has been completed and it will be realised with solar installations. However, the tendering is not according to the "Brutto Documents" of Task 24. The buyer groups for the "Solar roofs for the city of Zug" have been formed and there are contacts in order to monitor the activities to procure solar installations. Reference can also be made to activities in Zürich and Basel (which was informed about later at the Workshop). There is also interest from the utility in Lausanne.

The brochure "100 Solardächer für Basel" (in German) is attached as Appendix 9.

It is important to mention that the manufacturers are not particularly enthusiastic to the international initiative, which they think can be a threat. The Workshop which will be held during this Experts Meeting with Swiss representatives will be very important. There is a good contact with different organisations since both Christian Völlmin and Markus Portmann

are involved in these organisations - Christian Völlmin in the Commission for Thermal Solar Heating Initiatives, and Markus Portmann is Vice President of the manufacturers' society. Some utilities may be of interest, especially in view of the electricity deregulation.

6.6 Canada

Gerald Van Decker informed about the status in Canada, <u>Appendix 10</u>. See also the Canadian National Report attached as <u>Appendix 11</u>.

The communities of Peterborough and Toronto participated in the Phase I projects, which were administered by Peterborough Green-Up and the Energy Action Council of Toronto (EnerACT). All 17 Phase I systems have now been installed. The second tender has been issued. It is noted that there were fairly short periods for submitting tenders, a longer period would have given more opportunity for development.

Phase II is now ongoing and includes EnerAct and Peterborough Green-Up, jointly tendering for the supply of 15 and 20 systems, respectively. Three other communities (Sudbury, Perth and Ottawa) are observing the progress of Phase II, and they may initiate their own projects next year. There are requests for two system types from each manufacturer: low and high consumption. At least 40% of the energy must be supplied by the systems in a typical year, and there are strict criteria for some quality matters. The installation will start this autumn and also continue next spring. It is expected that more communities will participate in Phase III and up to 50 systems will be installed in each community.

A copy of the "Request Proposals for: The Supply of Solar Domestic Hot Water Systems – Phase II" is included as <u>Appendix 12</u>.

6.7 Summary

To sum up the national presentations, the following group work sessions will cover:

- Medium-sized systems.
- Tendering.
- Small systems.

One special problem also to be discussed if time allows, is how to organise the distribution and installation.

7. GROUP WORK

7.1 Medium-sized systems

Hans Isaksson informed about the *group work for medium-sized systems*.

He informed about the discussion regarding different ways of mounting the systems:

- One, which is free-standing (not at or on the house, but beside the house)
- the other, which is mounted/installed on the roof as a part of the construction.

The discussion had included: mounting alternatives, direct and indirect systems, standard modules, size of modules, borderline for delivery, and cost.

For medium-sized systems they had looked specifically at the collectors. Peter Out pointed out that they had always worked with the buyer groups. They want to have plug-in systems and more standards. Hans Westling also referred to the market transformation programme in energy efficiency appliances. From Denmark it is pointed out that the development is now more directed towards design by manufacturers, originally it was by consultants. One important thing is that installers could perhaps have an IEA quality control certificate.

There can be synergy for collaboration. In the future discussions, decisions could be taken to take part in the "Space for Solar" project in The Netherlands. There seemed to be good interest for this from Sweden, Switzerland and The Netherlands.

7.2 Tendering

Klaus Ellehauge informed that more work will be done on the "Brutto Package", which will be called a "Guide for Tenders" instead and will show examples for single-family houses in Appendix A, and for large solar collectors in Appendix B, and perhaps then something for medium-sized systems in Appendix C. The text will be shortened. The specification will be more based on standards and on performance criteria.

The structure will be to call the whole document "Request For Proposal (RFP)" and also to include on one of the first pages a summary of tenders and criteria. Reference to the web-site will also be made.

See also section 9, Contacts with suppliers, below.

7.3 Small systems

Lotte Gramkow informed about the *small systems*. The discussion had included:

- How to attract buyers.
- Work with organisations like WWF.
- Sales and installation infrastructure.
- Use of the same quality control procedures.
- The different markets and possible disturbance on existing markets.

In Denmark, there are limited resources now. Furthermore, a quality control procedure already exists.

7.4 Other discussion items

Peter Out stressed that it should be a sustainable market and not only one with the lowest price. Iben Østergaard stressed the importance of a web-site for interested buyers. Gerald Van Decker stressed that the focus should be on organisations that are already interested and on

environmental groups. The web-site should also be connected to the already existing homepages of the countries and organisations.

Other channels for information were discussed.

There are energy advisors in Sweden. It was stressed from Denmark that the most idealistic persons have already been found. Higher energy prices could mean raised interest in solar activities. Hans Westling suggested trying to work with Elsparefonden and Club A members, who are already interested, if they are not in the CHP (Combined Heat & Power) areas. The strategy in Sweden has been to form clusters in certain areas, which would facilitate the collaborative work.

7.5 Decisions

The Experts decided as follows:

- To go on with co-operative actions for medium-sized systems based on the "Space for Solar" initiatives.
- To investigate more collaboration through the WWF for small systems as proposed.
- To use the web-site more.
- To discuss the quality control procedures.
- To have possible collaboration with Belgium and Switzerland.
- To make the tender documents more summarised and more easy to use.
- To include in the tender documents:
 - More reference to standards in the tender documents.
 - Evaluation of the Swedish procurement, which will soon be finalised.
 - Discussion of a market transformation strategy.
 - Creation of more buyer groups.
- To draw up a timetable for different initiatives for the next Experts Meeting in March.
- To make preparations for additional work group activities at the next Experts Meeting.

8. SUBTASK B "CREATION OF TOOLS"

The Subtask B Leader, Klaus Ellehauge presented the work. The web-site has now been finalised in the first version, and it is essential to open up the web-site as soon as possible. The Ballot procedure, started in June, has been concluded. The Task 24 report "Business Tools" was approved in mid-August by the Executive Committee Members of Task 24 participating countries, subject to some suggested minor additions.

The Operating Agent had received a letter from Vanderpas Design & Communication (which was included in the pre-meeting documentation) about adding these revisions to the web-site and the costs for this work. It was established that it was not possible for Canada to make more contributions for these revisions (except for some minor changes). It had to be done in some other joint way. Iben Østergaard had also made some comments about this material.

It may be of interest to add further links to the countries' and other organisations' own homepages. Important is how the maintenance can be done, whether it can be included in a proposal for a small amount of money for cost sharing with contributions of 1,000 US dollars, or less, per country for the maintenance and the yearly cost for upholding a web address. If a new address is wanted, that is also one day's work and some money would have to be included for that work, too. At the same time, it could be discussed whether to have a completely new name instead of the name suggested in the ballot. Why not have www.solar.procurement? It was discussed whether to have that part called "Business Tools, or if this would be too much of a business oriented approach.

The Experts decided:

- That Klaus Ellehauge and Iben Østergaard together with Gerald Van Decker would draw up a draft answer, which will then be discussed with the Executive Committee Chairman.
- That the intention is to open up the web-site as soon as possible.
- To keep the name "Business Tools" since it will never be free-standing, but always be part of the solar web-site.
- That Matti Nordenström would send relevant links by 13 October to Iben Østergaard, who would try to set them up.

9. CONTACTS WITH SUPPLIERS

Hans Westling stressed that he had agreed with Teun Bokhoven, ASTIG, to send the material as soon as possible after this Experts Meeting, that means on Monday, 9 October. As this does not seem to be possible, the Operating Agent has to inform Teun Bokhoven that there will a delay. Major changes are being made in the material in order to facilitate the use of the document.

Addition: Hans Westling sent a mail to Teun Bokhoven on 11 October informing him about the delay.

As soon as the material is ready, Hans Westling will distribute it to ASTIG and ESSIF for their comments.

Addition: After the meeting, the "Brutto Text" was further worked on and two preliminary drafts "Example Tender Package – Solar heating systems for single family houses", <u>Appendix 13</u>, and "Example Tender Package – Collector Subsystems for Large Solar Heating Systems", <u>Appendix 14</u>, were produced. These drafts were sent to the supplier organisations ASTIG and ESIF by the Operating Agent on 20 and 23 October, respectively, asking for their comments by 15 December, if possible, <u>Appendix 15:1-2</u>.

A new ASTIG report, "Incentives for Solar thermal systems", prepared by Ecofys in cooperation with ASTIG, has been produced and printed in August 2000. Hans Westling has asked ASTIG to send copies of the report. Extracts are included as <u>Appendix 16</u>.

Contacts with suppliers have been taken in the different countries. Information was given that that there had been one meeting in Canada already. Every year there are two supplier meetings in Sweden in the SEAS group and the next meeting will be on 28 November in Karlstad, Sweden. There has also been one meeting in Denmark in August.

10. MIDTERM EVALUATION OF TASK 24

Klaus Ellehauge presented a memo as a proposal for discussion, <u>Appendix 17</u>, and informed about the plans for the Midterm Evaluation, see <u>Appendix 18</u>.

Klaus Ellehauge pointed out the importance of having goals, in general and for the national activities. It would be important to start the evaluation process by sending out a questionnaire to the countries, and in the evaluation include lessons learned and exchange of ideas and experience.

Programmes and promotions to influence the market and to make an impact were discussed, and whether this could be included or not. The Experts were asked to submit comments and suggestions to Klaus Ellehauge in the next few weeks. He would then have a draft ready by 15 January, 2001.

11. STUDY TOUR

In the afternoon of October 2, there was a study-tour to Boilerfabrik BUMA (storage tank producer) who works together with Schweitzer (collector producer). The high quality and special procedures to keep the enamelling were pointed out. Other issues informed about were the prefab and "plug-and-play" work, automatic welding, etc. Information was also given by Uli Frey from SBF about quality and test procedures, and also about accelerated testing and development of software tools. This organisation also offers consulting services. He informed about the importance of working more with performance criteria. It is also found that the heat pumps had been successful, perhaps because of comprehensive lobbying.

Material about Josef Burri AG, Boilerfabrik BUMA, is attached as <u>Appendix 19:1-3</u> and about some of the products from Ernst Schweizer AG in <u>Appendix 20:1-3</u>.

12. THE IEA TASK 24 WORKSHOP

In connection with the Experts Meeting, a Workshop was held in the afternoon of Tuesday, 3 October, with participation of invited Swiss specialists. The programme is attached as <u>Appendix 21</u> and the list of participants as <u>Appendix 22</u>. The Task 24 Experts had been asked to give presentations about the ongoing work in their countries. A special file with copies of the different presentations had been prepared before the Workshop.

13. TIME SCHEDULE AND TASK STATUS REPORT

The countries' different buyer initiatives had been summarised in a draft time-schedule overview by Hans Westling. A copy of the draft was handed over to the different countries and they were asked to come forward with suggestions for changes as soon as possible, by 15 October at the latest, so that it can be used for the Task Status Report. A revised draft is attached as <u>Appendix 23</u>. Switzerland was also asked to update the overview of the Swiss national projects to have it as a background for the Task Status Report.

The Experts discussed the Milestone Table attached in the pre-meeting documentation. Hans Westling will provide further explanation.

For Subtask A, Procurement and Marketing, milestones 3 and 4 - start of delivery - have started in Canada and may start in Denmark at the end of November/December and possibly also in Sweden in December. There have already been deliveries in The Netherlands and Switzerland.

For Subtask B, Creation of Tools, milestone 3 - updated second edition draft - there will be some additional material easily included as it is now existing as a web solution. There will be more continuous updating, and certainly some additional tender documents will also be included before the end of this year. This means that this milestone has been fulfilled. We will also have an evaluation of the First Round as a draft by the end of January, which will be in time for milestone 4 - February 2001.

Addition: The Task Status Report was sent by e-mail to all Executive Committee Members, Operating Agents and Task 24 Experts on 25 October. A copy of the report is included here as Appendix 24.

14. POSSIBLE IEA SHC AWARD OF EXCELLENCE

Hans Westling briefly informed about the last SHC Executive Committee Meeting, in Copenhagen, June 2000, where the Executive Committee voted in favour of an "IEA SHC Award of Excellence" (see extracts from the Minutes, <u>Appendix 25</u>). The next actions are to present the costs, expected outcome and possible risks at the November Executive Committee Meeting. Information about this was to be included in the October Task Status Report.

A discussion about the Award took place, based on the document included in the June Task Status Report. Most of the Experts were in favour of using an Award for the Second Round of procurements. Most of the Experts stressed that, based on experience from the "Solar City Award" in Denmark, it would take about a year from the date of a final decision to have all material ready. The cost would be about 160,000 Danish crowns for jury meeting, press release, information, and the production of a nice-looking award. Hans Westling was to work further on the Award document and wanted to have the Experts' reactions on the document before including it in the Task Status Report. Peter Out stated that, in his opinion, the document included in the June Task Status Report was a good draft and could be further worked on by Hans Westling.

Items discussed by the Experts were: It is important to clearly describe the resources in costs. How can the prestige be raised, how to have a good event that will attract a lot of interest and give good publicity? Such an event can of course be one of the Solar events. One event is the "North Sun" in the Netherlands in May 2001, which would be too soon. There is also the "ISES World Solar Congress" in 2003. Who are the most important persons and organisations to attract? The Award competition could be open both to buyers and suppliers, which most of the Experts agreed to. There could be a maximum of two rounds: in 2002 and 2003. Should there be formal applications, or should the jury appoint some organisations for the Award? The rules should not be too strict, but more open. Should the Award be for "outstanding development", or should it only be for "large size" (in numbers or square metres)? Here we

have a good chance of raising interest. Matti Nordenström stressed the importance of Awards for leadership also by individual persons and energy advisors.

The Experts decided that:

- Gerald Van Decker would send information about the Canadian Award.
- Hans Westling would draw up a second draft and do the work together with Iben Østergaard, who had some experience.
- That the cost would be in the magnitude of about 20,000 US dollars.
- That the planning should be for one round, preferably in connection with the "ISES World Solar Congress" in Gothenburg in 2003.

Addition: Hans Westling distributed a draft by e-mail 20 October to the Experts for their comments. After discussions with some of the Experts and inclusion of the comments received, the document was included in the October Task Status Report.

15. MARKET UPGRADING AND PURCHASE CRITERIA

Gerald Van Decker made some points about market upgrading and about purchase criteria, see <u>Appendix 26</u>. He wanted ideas about this from others. Peter Out stated that there must be a long-term process, at least 5 years, and many instruments have to be used. Hans Westling pointed out that this has also been confirmed in the findings from Annex III "Co-operative Procurement" of the IEA DSM Agreement. Financial incentives, standards, labelling, good quality control, accepted rules and warranties are needed. Another important aspect is to involve all stakeholders. It is difficult to compare the influence and impact of the different instruments as many are using them at the same time and the situation is changing. Very important is to show the good quality of systems.

Some of the Experts stated that the *pay-back time* should not be longer than 3 to 4 years in order to look attractive to buyers. Others stated that the *price* is not the most important thing, the *image* is more important. The energy performance code, where solar is one solution, was also discussed. How engaged is the government? The leadership is very important. There have to be positive stakeholders. Lobbying should be more used. Hans Westling would send the Annex III Final Management Report to Gerald Van Decker.

A successful Danish project, Wind Turbines, could also have some lessons to offer. Here it was the collaborative traditions in the countryside which was very important. Hans Westling also pointed out the importance of the creation of the Danish testing facility for Wind Turbines, Risø, available for the actors at a low cost.

Hans Westling also pointed out that the profile and the status, positive and negative, are important. A comparison should be made - a sort of table of selection criteria for tenders.

It is also important to have an agenda for the coming months for the preparations of the joint Second Round.

16. GENERAL INFORMATION ACTIVITIES FOR TASK 24

16.1 Sources for additional funding

It was informed that the ALTENER application had not been successful. And nothing had been heard about the application to the EU 5th Framework Programme.

Addition: According to information from Michael Rantil, the SHC Executive Committee representative of Sweden, the application had not been successful.

Other sources for funding are very important. One example is the funding for Swedish activities from the LIP Office in Stockholm.

16.2 Calendar for Solar buyer group events in the future

Iben Østergaard informed about the" Moving Conference Changing Roofs of Europe", which will be held in Copenhagen on 25-27 November 2000, see <u>Appendix 27</u>. On that occasion, the "Space for Solar" approach should be taken up in a sort of collaborative working group.

Other events are the conference "Large Solar Buildings" which will be held in Vienna 1 December 2000, and a conference in Warsaw 29 March 2001.

16.3 Task 24 Newsletter

The Task 24 newsletter, "News from the IEA SHC Task 24", will be produced by Denmark twice a year, which is good. At the Experts Meeting the countries were asked to send in 10-15 lines as a summary from their country to Iben Østergaard.

16.4 The OPET network

There was an OPET workshop, organised by Anders Berglind, OPET Sweden, in connection with the "EuroSun 2000" conference in Copenhagen in June (just before the Executive Committee Meeting). The Experts stated that it can still be of interest to use the OPET network for information. Another OPET meeting was held on 7 September in connection with the Solar Conference in Gleisdorf, see <u>Appendix 28</u>.

16.5 Web links

It was decided that the Experts will exchange information in order to establish more links between different existing home-pages.

17. MATTERS FOR EXECUTIVE COMMITTEE CONSIDERATION

Some matters for Executive Committee consideration had earlier been discussed (see above) - the Award and also the updating of the web-site. The Experts suggested to ask for a cost share contribution from the participating countries with up to 5,000 US dollars per year. This means a total of 20-25,000 US dollars, which would be enough for both the preparations of an Award ceremony and for the updating of the web-site including the annual maintenance.

18. CHECKLIST OF ACTIONS

A summary of important parts in the presentations and discussions drawn up at the Meeting is included in <u>Appendix 29</u> and a short checklist of remaining actions is included here as <u>Appendix 30</u>.

19. SCHEDULE FOR FUTURE TASK 24 EXPERTS MEETINGS

The Experts decided that the next Task 24 Experts Meetings would be held:

- 21-23 March 2001 in the county of Värmland, Sweden.
- In September 2001, some time between 17 28 September, in The Netherlands.

20. CONCLUSIONS AND THANKS

On behalf of all the Experts present, Hans Westling thanked Switzerland, and especially Markus Portmann, Christian Völlmin and Ruth Koch, for the excellent preparations and arrangements for the Experts Meeting. The very beautiful premises for the meeting have also been much appreciated as have the interesting study tours, the possibilities of exchanging experience with Swiss specialists and the cultural activities during these days of meeting. The Experts Meeting was then adjourned.

APPENDICES

- 1. "Task 24 Distribution List" (updated 30 October 2000).
- 2. "Preliminary Agenda", Task 24 Experts Meeting, 2-4 October 2000, Lucerne, Switzerland (17 September 2000)
- 3. "Task 24 Overview of National Projects" (updated 8 November 2000), Hans Westling and National Co-ordinators.
- 4. "Task 24 Solar Procurement- Subtask A: Work until now, National activities", copies of overheads presented by Peter Out, 2/10/00.

- 5. "Solar Procurement and Marketing Subtask A: Presentation of the Danish initiatives", copies of overheads presented by Lotte Gramkow, Oct. 3, 2000.
- 6. "Solfangere giver gevinst på 5.000 kr. skattefritt" /solar collectors give a profit of 5.000 danish kroner taxfree/, article (in Danish) which has been inserted in some local papers in the Thy and Morsø areas, Denmark.
- 7. "Ett gratis soltilbud får man ikke hver dag: Faelles indkøb af solvarmeanlaeg" /You don't get solar offer free every day: Joint purchases of solar heating equipment/, brochure (in Danish) used in Denmark.
- 8. "Underlag för Intresseanmälan/Anmälan till köpargrupper Småsol", the interest application form for smaller systems in Sweden.
- 9. "100 Solardächer für Basel" /100 solar roofs for Basel/, brochure (in German) used in Switzerland.
- 10. "IEA SH&C Task 24 Oct. 2000 Status in Canada", copies of overheads presented by Gerald Van Decker.
- 11. "IEA Solar Heating & Cooling Programme Task 24: Fall 2000 Canadian National Report", Gerald Van Decker, 27 September 2000.
- 12. "Requests Proposals for: The Supply of Solar Domestic Hot Water Systems Phase II", September 21, 2000. Proponents: Peterborough Green-Up and The Energy Action Council of Toronto".
- 13. "Example Tender Package Solar heating systems for single family houses Incomplete preliminary draft", October 2000, IEA 24 Solar Procurement Subtask 24, Klaus Ellehauge.
- 14. "Example Tender Package Collector Subsystems for Large Solar Heating Systems Incomplete preliminary draft", October 2000, IEA 24 Solar Procurement Subtask 24, Klaus Ellehauge.
- 15. 1. E-mail 20 October 2000 to ASTIG, c/o Teun Bokhoven, from Hans Westling about "Solar Examples Tender Documents for review".
 - 2. E-mail 23 October 2000 to ESIF, c/o Rainer Berkmann, from Hans Westling about "Solar Examples Tender Documents for review".
- 16. Extracts from "Incentives for Solar thermal systems (and their motives in 11 European countries), ASTIG (Active Solar Thermal Industry Group), August 2000, ASTIG-report: DSMT.
- 17. "Proposal for discussion: Evaluation of the projects and cases carried out in the IEA Task 24", 2000-09-27, Iben Østergaard and Klaus Ellehauge.
- 18. "Matters for evaluation", copies of overheads presented by Klaus Ellehauge at the meeting.

- 19. 1. "Josef Burri AG, Boilerfabrik BUMA, 6102 Malters". Presentation (in German) about BUMA, Switzerland.
 - 2. "Doch modernste Produktionsstätte Josef Burri AG, Malters", copy of article (in German) from the magazine "Der Installateur, no. 12/1992.
 - 3. "Entweder Oder", copy of brochure (in German) about storage tanks from Josef Burri AG.
- 20. 1. "Sonnenkollektoren von Schweizer", copy of brochure (in German) about the solar collectors of Ernst Schweizer AG, Hedingen, Switzerland.
 - 2. "Solar Compactline: Solares Brauchwasser für Einfamilienhüser", copy of brochure (in German) about new concept for solar collectors from Ernst Schweizer AG.
 - 3. "Solar Compactline; Warmwasser und Strom für das Einfamilienhaus", copy of brochure (in German) about PVs from Ernst Schweizer AG.
- 21. Programme from "IEA Task 24 Workshop", 3 October 2000 in Lucerne.
- 22. List of participants at the "IEA Task 24 Workshop", 3 October 2000 in Lucerne.
- 23. "IEA SHC Task 24 Solar Procurement Time Schedule", Hans Westling, draft 8 November 2000.
- 24. "IEA SHC Task 24 Solar Procurement Task Status Report, October 2000", Hans Westling.
- 25. Extracts about Task 24 from "Minutes of the 47th Executive Committee Meeting of the IEA Solar Heating and Cooling Programme, 22-23 June 2000, Copenhagen, Denmark".
- 26. "A Moving Conference Changing Roofs of Europe", copy of brochure about the conference to be held 25-27 November 2000 in Copenhagen, Denmark.
- 27. "Purchase Criteria", copy of overhead presented by Gerald Van Decker.
- 28. "Solar thermal energy co-operation 2000". Results of OPET-Meeting in Gleisdorf, Thursday 7th September 2000, 17:00-19:30.
- 29. "Action points IEA 24 Oct 2000", summary of presentations and discussions drawn up at the Experts Meeting by Peter Out.
- 30. "Task 24 List of Actions", as decided at the Experts Meeting, Lucerne, Switzerland, 2-4 October 2000, Hans Westling.

DISTRIBUTION

These Minutes are distributed to the Experts on the Task 24 Distribution List, Appendix 1.