

**GROUND-MED PROJECT: “ADVANCED GROUND SOURCE HEAT PUMP SYSTEMS FOR HEATING AND COOLING IN MEDITERRANEAN CLIMATE”**

**KICK-OFF MEETING**

**Venue: CRES offices, 19<sup>th</sup> km Marathonos ave., 19009 Pikermi Attikis, Athens, Greece**

**Date: 15-16 January 2009**

**LIST OF PARTICIPANTS**

01-CRES	D. Mendrinos	C. Karytsas	A. Benou
02-CEA	-		
03-EHPA	T. Nowak		
04-FIZ	A. Lehmann		
05-CIAT	E. Auzenet	G. Garido	
06-HIREF	A. Quercioli	A. Sorbeto	
07-UOR	M. Rosca	D. Rosca	
08-ISR UC	An. de Almeida		
09-GEJZIR	P. Kralj		
10-GEOTEAM	J. Goldbrunner		
11-UPV	Jose Miguel Corberan	Ap. Kalesis	Carla Montaeud
12-BES	Sofia Martinez		
13-ECO	Jose Puig		
14-EGEC	Ph. Dumas		
15-GRETh	-		
16-NUID UCD	Donal Finn		
17-UNIPD	Davide Del Col		
18-EDRASHIS	V. Ramoutsakis	Marios Karanikitas	
19-CETIAT	Ahmed Bensafi		
20-OCHSNER	-		
21-ESTSetubal	Rita Cerdeira		
22-GROENH	Henk Witte		
23-KTH	Bjorn Palm		
24-ENEREN	Massimo Nelti		

## PROGRAM

<i>Day 1: 15 January 2009</i>		
9:00	Departure from Golden Age Hotel downtown, Transport to CRES offices by coach	All participants
10:00	Introduction to Ground-Med project	D. Mendrinos, CRES
10:30	Ground-Med financial management and reporting	C. Karytsas, CRES
11:00	Coffee break	
11:15	Presentation of partners – 5 min each	All participants
13:15	Lunch break	
14:30	Ground-Med consortium agreement	C. Karytsas, D.Mendrinos, CRES
15:00	Discussion on the consortium agreement	All partners
15:30	Need for contract amendment	C. Karytsas, CRES
16:00	Discussion	All participants
16:30	End of day 1, transport to Golden Age Hotel downtown by coach	
20:00	Dinner, downtown	

<i>Day 2: 16 January 2009</i>		
9:00	Departure from Golden Age Hotel downtown, Transport to CRES offices by coach	All participants
9:30	WP1 project management	D. Mendrinos, CRES
10:00	WP2 large capacity advanced heat pump prototypes and system components	M. Abry, CIAT
10:30	WP3 low/medium capacity advanced heat pump prototypes	Prof. Davide del Col, UNIPD
11:00	Coffee break	
11:15	WP4 integrated system control	Dr. Donal Finn, UCD
11:45	WP5 integrated system engineering design.  Brief presentation of demo systems at the sites	Prof. Jose Miguel Corberan, UPV GEJZIR
12:15	WP9 dissemination and training	Axel Lehmann, FIZ
12:45	Demo sites introduction and licensing from local Authorities – 10 min each	CIAT, 50 kW UOR, ISR-UC, 100 kW UPV, ECOSERVEIS, HIREF, EDRASIS
14:30	Lunch	
15:30	End of Meeting, transport downtown by coach	

## MINUTES

The above program was followed. The project, its financial and technical management and the consortium agreement were presented by the coordinator. Work package leaders presented their corresponding work package, while the partners responsible for the demo sites presented their corresponding building. Discussion between participants followed after each presentation. Implementation of work packages 2, 3, 4 and 5 has already started on 1 January 2009.

Work package 9 will also start earlier than schedule, on 1 January 2009, in order to have the web site on the air on time. A project logo will be prepared by FIZ. The target group and program of the training courses will be determined by the organizing partner; the project results should be included; EHPA and EGEC could also make available some of the lecturing material they have already developed. Lecturers will be proposed by partners. If possible, their expenses will be covered by the sending partner; otherwise they will be covered by the organizers.

As explained during the meeting, and also in the email sent by T.Nowak, it exists an EU certification and training program for heat pumps installers (managed by EHPA) and a project is creating an EU certification and training framework for shallow geothermal installations: designers and installers/drillers of the geothermal system. The Geotrained project: <http://www.geotrained.eu/>; participants to the Ground Med meeting (WP5) in Valencia, 2-3 March, could meet the Geotrained partners. Indeed a project meeting is organized there, same days-same place (UPV).

### **Consortium Agreement**

Changes to the consortium agreement were discussed and recorded. CRES will send by email the revised consortium agreement to all partners for approval by the partners legal departments.

### **Need for Contract amendment**

EGEC asks for a contract amendment concerning the beneficiary n°14: EGEC is not the European Health Telematics Association.

The work package leader of WP#4 (UCD) pointed the need to extend WP#4 till the end of the project, in order to continue to improve the deliverables of D4.1, D4.3, D4.4 and D4.5, using the monitoring results from the different demonstration sites. The implementation of other work packages and the project itself will not be affected as these deliverables will be delivered on time, but then will be further improved as new data are obtained.

Partners ISR-UC and GROENH should be included in the research team of WP#2 as well, in order to be able to contribute their accumulated experience on the heat pumps development to the large capacity heat pumps as well. This can be best achieved by transferring 4 person-months from ISR-UC budget of WP#3 to WP#2, and by transferring 1 person-months from GROENH budget of WP#4 to WP#2, as their overall project budget and EC contribution are not affected. The reasons are:

- ISR will be demonstrating a large HP in our test site
- ISR can offer significant input in the area of energy efficient motors and drives for the HP, Fan Coil Units and Air Handling unit, as well as in the test of energy storage PCM modules (if ISR obtains co-funding for the demo they will also install a storage module in their system)
- In WP3 ISR can do similar work in the area of energy efficient motors and drives for the HP,

The participation of UNIPD to WP#5 is also necessary in order to be able to contribute its experience in GSHP systems design to the engineering design of the HIREF demonstration site. This can be best achieved by transferring 1 person-month from UNIPD budget of WP#7 to WP#5, as their overall project budget and EC contribution are not affected.

Concerning WP#9, it should be mentioned that participation in relevant workshops and conferences to disseminate information must start now (month 1). Indeed, EGEC already plans to make the promotion of Ground Med in several events.

ISR-UC mentioned that a change in timing of training course of Portugal (D9.9) at a latter time should be made in order to be able to present the project results; at month 12, when the seminar is planned there will be no results from the demo site to present. In particular, the Training in Coimbra, is suggested to be held in month 30 (June 2011). This will allow ISR to participate in a previous training module and by mid 2011, hopefully there should be already some relevant material to show on ISR test site.

The corresponding request for contract amendment will be made to EC by the coordinator after a few months time, in order to allow some time for other partners (e.g. EHPA) to better identify similar needs, which are necessary for the better implementation of the project.

### **Next meetings**

A meeting with Ochsner should be organized as soon as possible; The coordinator (CRES), WP#3 work package leader (UNIPD), and the demo site owners where the advanced OCHSNER heat pumps will be installed (UOR, EDRASIS, GEJZIR) should be present; to be arranged by CRES.

A meeting for WP#2 will take place in CIAT premises in April; the corresponding date will be communicated to partners concerned by CIAT.

Due to the same partners involved the next meetings of WP#3 and WP#4 will be held together. The exact date will be decided after meeting with Ochsner.

Next meeting WP#5 in Valencia: arrive 2 (meeting in afternoon) and leave 3 March (meeting in morning). If OCHSNER agrees, the WP#3/4 meeting can take place also in Valencia after the WP#5 meeting.