

Brussels, 02.12.2015

**GRANT AGREEMENT 649894 – EEPLIANT**  
**Call for Tender for Test Laboratories**  
**Product Activity: WP6 Joint Testing of Heaters**  
**Heat Pumps with a Rated Output of 25 kW or less**

## 1. Background

PROSAFE is an international non-governmental organisation established in 1991 by market surveillance officers from various countries throughout Europe. Its main aim is to contribute to the safety of products and services by promoting best practices in market surveillance. Since 2006, PROSAFE has established itself as the organising and coordinating body for Joint Market Surveillance Actions in Europe. PROSAFE's official name is "Stichting PROSAFE". It is a foundation under Dutch law.

PROSAFE's main task is to coordinate Actions. Each Action comprises a number of product-specific activities that target specific product groups, and a number of activities aiming at developing methods and best practices.

In 2014, PROSAFE became the coordinator for the Market Surveillance Action EEPLIANT 2014. The Action started in March 2015 and will end in June 2017. One of the Work Packages in the Action will address heaters with a rated output below 400 kW.

The Action identifies a number of roles and responsibilities:

- A Project Leader for the EEPLIANT Action has been appointed. He is responsible for the performance, reporting and coordination of the Work Package Leaders of the individual Work Packages;
- A Member State representative has been selected as Work Package Leader responsible for carrying out the activities of Work Package 6 on heaters.
- An external consultant has been selected as Facilitator responsible for the daily coordination of Work Package 6 on heaters;
- PROSAFE's Executive Director is responsible for the general and financial management of the Action.

## 2. The scope of the tender

An important part of the EEPLIANT Action is the testing of heaters. The purpose of the testing is to evaluate whether a specific product complies with the Commission Delegated Regulation (EU) No. 811/2013 of 18 February 2013, Commission Regulation (EU) No 814/2013 of 2 August 2013 and Directive 2010/30/EU.

The testing targets heat pump space heaters and heat pump combination heaters with a rated output up to approximately 25 kW. The heaters will be air-to-water or brine-to-water heat pump space heaters or heat pump combination heaters.

The testing is based on the requirements defined in regulation 811/2013 and the relevant test standards defined in Commission Communication 2014/C 207/02. The testing methods for vapour compression electrically driven heat pumps are described in EN 14825:2013, section 8 and 9.

The testing of air-to-water heat pump space heaters or heat pump combination heaters comprises the parameters listed in the below table 1.

The testing of brine-to-water heat pump space heaters or heat pump combination heaters comprises the parameters listed in table 2 further below.

No.	Parameter (air-to-water units)	Reference	Unit costs (EUR incl. VAT)		
			2-5 samples	6-10 samples	+3 items for one sample
1A	Rated heat output for average, warmer and colder climate conditions.	EN 14825:2013			
1B	Same as 1A above, but only for warmer and colder climate conditions.	Same as 1A above.			
1C	Same as 1A above, but only for average climate conditions.	Same as 1A above.			
2A	Calculation of seasonal coefficient of performance SCOP for medium temperature application for average, warmer and colder climate conditions.	EN 14825:2013, section 7. Test conditions are described in: <ul style="list-style-type: none"> <li>EN 14825:2013, section 5.4.4, Tables 18,19 and 20.</li> <li>Commission Communication 2014/C 207/02.</li> </ul>			
2B	Same as 2A above, but only for warmer and colder climate conditions.	Same as 2A above.			
2C	Same as 2A above, but only for average climate conditions.	Same as 2A above.			
3A	Calculation of seasonal coefficient of performance SCOP for low temperature application for average, warmer and colder climate conditions.	EN 14825:2013, section 7. Test conditions are described in: <ul style="list-style-type: none"> <li>EN 14825:2013, section 5.4.2, Tables 11,12 and 13.</li> <li>Commission Communication 2014/C 207/02.</li> </ul>			
3B	Same as item 3 above, but only for warmer and colder climate conditions.	Same as item 3 above.			
3C	Same as item 3 above, but only for warmer and colder climate conditions.	Same as item 3 above.			
4	Seasonal space heating energy efficiency $\eta_s$	Commission Communication 2014/C 207/02, point 5			
5	Emission of nitrogen oxides NO <sub>x</sub>	Commission Communication 2014/C 207/02			

No.	Parameter (air-to-water units)	Reference	Unit costs (EUR incl. VAT)		
			2-5 samples	6-10 samples	+3 items for one sample
6	Sound power level ( $L_{WA}$ )	EN 12102:2013			
7	Water heating energy efficiency $\eta_{wh}$ of heat pump combination heaters, $Q_{elec}$ and $Q_{fuel}$	Commission Regulation No 814/2013, Annex IV §3.a Commission Communication 2014/C 207/03 Directive 2010/30/EU			

Table 1: Parameters to be tested for air-to-water units including references to relevant standards.

No.	Parameter (brine-to-water units)	Reference	Unit costs (EUR incl. VAT)		
			2-5 samples	6-10 samples	+3 items for one sample
1A	Rated heat output for average, warmer and colder climate conditions.	EN 14825:2013			
1B	Same as 1A above, but only for warmer and colder climate conditions.	Same as 1A above.			
1C	Same as 1A above, but only for average climate conditions.	Same as 1A above.			
2A	Calculation of seasonal coefficient of performance SCOP for medium temperature application for average, warmer and colder climate conditions.	EN 14825:2013, section 7. Test conditions are described in: <ul style="list-style-type: none"> <li>Section 5.5.4, Tables 30,31 and 32.</li> <li>Commission Communication 2014/C 207/02.</li> </ul>			
2B	Same as 2A above, but only for warmer and colder climate conditions.	Same as 2A above.			
2C	Same as 2A above, but only for average climate conditions.	Same as 2A above.			
3A	Calculation of seasonal coefficient of performance SCOP for low temperature application for average, warmer and colder climate conditions.	EN 14825:2013, section 7. Test conditions are described in: <ul style="list-style-type: none"> <li>Section 5.5.2, Tables 24,25 and 26.</li> <li>Commission Communication 2014/C 207/02.</li> </ul>			

No.	Parameter (brine-to-water units)	Reference	Unit costs (EUR incl. VAT)		
			2-5 samples	6-10 samples	+3 items for one sample
3B	Same as item 3 above, but only for warmer and colder climate conditions.	Same as item 3 above.			
3C	Same as item 3 above, but only for warmer and colder climate conditions.	Same as item 3 above.			
4	Seasonal space heating Energy efficiency $\eta_s$	Commission Communication 2014/C 207/02, point 5			
5	Emission of nitrogen oxides $\text{NO}_x$	Commission Communication 2014/C 207/02			
6	Sound power level ( $L_{WA}$ )	EN 12102:2013			
7	Water heating energy efficiency $\eta_{wh}$ of heat pump combination heaters, $Q_{elec}$ and $Q_{fuel}$	Commission Regulation No 814/2013, Annex IV §3.a Commission Communication 2014/C 207/03 Directive 2010/30/EU			

Table 2: Parameters to be tested for brine-to-water units including references to relevant standards.

A, B and C are to be understood as options for tests 1, 2 and 3. The Market Surveillance Authorities may decide to have a heat pump tested under conditions for average, warmer and colder climate (options A) OR under conditions for warmer and colder climate (options B) OR under conditions for average climate conditions (options C).

The full titles of the standards and other papers mentioned in the above table are:

- EN 12102:2013, Air conditioners, liquid chilling packages, heat pumps and dehumidifiers with electrically driven compressors for space heating and cooling - Measurement of airborne noise - Determination of the sound power
- EN 14825:2013, Air conditioners, liquid chilling packages and heat pumps, with electrically driven compressors, for space heating and cooling - Testing and rating at part load conditions and calculation of seasonal performance
- EN 15502-1:2012, Gas-fired heating boilers - Part 1: General requirements and tests
- Commission Communication 2014/C 207/02, Commission communication in the framework of the implementation of Commission Regulation (EU) No 813/2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and of Commission Delegated Regulation (EU) No 811/2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.
- Commission Communication 2014/C 207/03 in the framework of the implementation of Commission Regulation No 814/2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks, and of the implementation of Commission Delegate Regulation (EU) No 812/2013 implementing Directive 2010/30/EU of the European Parliament and of the Council with regards to energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device.

- Commission Regulation (EU) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks.
- Directive 2010/30/EU of the European Parliament and of the Council with regards to energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device.

The task comprises the following services:

- Testing approximately 5 samples of heat pump space heaters or heat pump combination heaters with a rated output up to approximately 25 kW. The precise number of samples may deviate from this budget value and will be determined by the Activity Leader and the Facilitator during the course of the Action. Testing of further samples might be requested by individual Member States outside the financial scheme of the Action.
- The Activity may ask the laboratory to participate in one or more project meetings, for instance to explain test methods or test results to the Member States.
- The Activity may ask the laboratory to host a project meeting for the representatives from the participating Member States.
- Other services.

The testing is provisionally planned to start Q1, 2016 and end Q3, 2016. This timeline may change.

### 3. Delivery of samples

The samples will be provided by Market Surveillance Authorities in Belgium, Bulgaria, Denmark, the Netherlands, Sweden and United Kingdom.

The Market Surveillance Authorities will provide one item of each sample for the examination and testing. Each sample will be sent to the laboratory directly from the concerned Market Surveillance Authority accompanied by a letter that identifies the sample, the Action, the Authority and specific requirements for the testing, if any.

If the test results for a specific model are contested by the economic operator, the involved Authority may decide to submit a further 3 items of the sample for examination and testing. They will be sent directly from the Market Surveillance Authority accompanied by a list that identifies the samples, the Action, the Authority and specific requirements for the testing, if any.

### 4. Delivery of test results

The laboratory must provide the results from the tests in a full test report in a standardised digital electronic format. The laboratory shall provide separate test reports for each heat pump. The report must include results for all the parameters from table 1 (with exemptions as requested by the Market Surveillance Authority) and it must indicate the measured value for each parameter and not only "failed" or "passed".

The test report for a particular heat pump must be delivered within 10 working days after testing has ended.

Test reports are to be sent in hardcopy to the Market Surveillance Authority that submitted the sample and in copy, by email, to the WP6 Facilitator.

Furthermore, the laboratory must provide an overview test report and a table with the findings for all tested models.

### 5. Specification of further tender requirements

The following general requirements apply:

*Main requirements:*

- Ability to carry out the test required. Laboratories with an accreditation according to EN 17025 based on evidence or similar for the required standards and tests will be preferred to laboratories without such accreditations.
- Full independence from manufacturers, importers or other economic operators in the market for heating products.

- Excellent active and passive knowledge of the English language. Preferably good knowledge of other official European languages.

*Management requirements:*

- It is the responsibility of the laboratory to carry out its testing and calibration activities in such a way as to meet the respective requirements of the tender specifications as well as in EU regulations 811/2013 and 813/2013.
- The laboratory shall have managerial and technical personnel who have the authority, resources and necessary skills needed to carry out their duties.
- The laboratory shall provide adequate supervision of testing and calibration staff by persons familiar with methods and procedures, purpose of each test and/or calibration, and with the assessment of the test or calibration results.
- The laboratory shall establish and maintain procedures for the review of requests. The policies and procedures for these reviews leading to a contract for testing and/or calibration shall ensure that the laboratory has the capability and resources to meet the requirements.
- Any differences between the request and the contract shall be resolved before any work commences.
- The Facilitator shall be informed immediately of any deviation from the contract.
- The laboratory shall establish and maintain procedures for identification, collection, indexing, access, filing, storage, maintenance and disposal of quality and technical records.
- The laboratory shall have procedures to protect and backup records stored electronically and to prevent unauthorized access to or amendment of these records.

*Requirements regarding the technical skills:*

- The laboratory management shall ensure the competence of all who operate specific equipment, perform test and/or calibrations, evaluate results, and sign test reports and certificates. When using staff undergoing training, appropriate supervision shall be provided. Personnel performing specific tasks shall be qualified based on appropriate education, training, experience and/or demonstrated skills, as required.
- Laboratory facilities for testing and/or calibration, including but not limited to energy sources, lighting and environmental conditions, shall be such as to facilitate correct performance of the tests and/or calibrations.
- All equipment used for tests and/or calibrations, including equipment for subsidiary measurements having a significant effect on the accuracy or validity of the result of the test, calibration or sampling, shall be calibrated before being put into service.
- The laboratory shall have due experience in the field of testing.
- The laboratory shall have experience in performing tests related to gas boilers according to the standards mentioned and in interpreting test results and classification issues.

*Requirements regarding subcontracting:*

- PROSAFE does not accept that the selected laboratory further subcontracts the testing services.

## 6. Quotation requirements

The tenderer is requested to quote prices for the following services:

- 1) Testing of compliance of a heat pump with the requirements in table 1. The quote shall:
  - a. indicate prices for each requirement in table 1 and table 2;
  - b. indicate prices per sample for testing 2-5 samples and 6-10 samples;
  - c. indicate the price for a subsequent test of an additional 3 items of an already tested heat pump.

These costs can be indicated in the three empty columns in table 1 and table 2.

- 2) Producing a test report for each sample. The test report must indicate the measured value for each parameter. The quote must be per sample.
- 3) Producing an overview table with the findings for all received samples.

**The tenderer must quote all prices including VAT.** PROSAFE is not able to recover VAT and does not accept the reverse charge scheme.

The quotation must describe the capacity of the laboratory, i.e. number of simultaneous tests that can be undertaken, turn-around time and time to set up a test.

The tenderer must explain where the testing will take place (which country). For practical reasons, PROSAFE will only in exceptional cases engage with laboratories where the testing is going to take place outside the EU/EEA countries.

The tenderer must describe qualifications and experience in line with the requirements mentioned in chapter 2 and 5, in particular the main requirements listed in chapter 5.

## 7. Selection process

The selection will be based on the following criteria:

- The tenderer's ability to carry out the specific tests.
- The tenderer's experience with testing of heat pump space heaters in this specific area.
- The tenderer's formal qualifications (e.g. accreditation(s)). Laboratories with an accreditation for the required standards and tests will be preferred to laboratories without such accreditations.
- Price including VAT.
- Delivery time.
- Capacity.
- Terms of delivery.
- The tenderer's ability to supply additional services to the Action.
- The tenderer's ability to serve individual Member State with testing of heat pumps outside the Action.
- PROSAFE's general impression of the tenderer's ability to undertake the job.

The selection will follow a 2-stage process. First, one or more laboratories will be shortlisted based on the received tenders. Second, a meeting may be arranged between representatives from the Action and representatives from the shortlisted laboratory(-ies) in their premises to allow a more thorough discussion of the assignment.

The tenderer is invited to provide additional information to ease PROSAFE's evaluation of the services being offered, the prices and other aspects related to the selection criteria as mentioned above.

It is emphasised that PROSAFE may decide to assign the testing to more than one laboratory.

## 8. Deadline

Quotations shall be sent to the offices of PROSAFE Secretariat in hardcopy (Avenue des Arts/Kunstlaan 41, 2<sup>nd</sup> floor, B-1040 Brussels, Belgium) and via email to [info@prosafe.org](mailto:info@prosafe.org).

The email shall be copied to the WP6 Facilitator, Torben Rahbek, email [torben.rahbek@prosafe.org](mailto:torben.rahbek@prosafe.org).

Quotations shall be received at PROSAFE no later than **15 January at 16:00** (Time Zone: GMT +1 hour). Quotations received after the deadline are rejected.

## 9. Further information

The contract will be signed under Dutch legislation.

Further information regarding the task and the selection procedure can be obtained from the Facilitator at the address:

PROSAFE Secretariat  
Avenue des Arts/Kunstlaan 41, 2<sup>nd</sup> floor  
B-1040 Brussels  
Belgium  
Email: [info@prosafe.org](mailto:info@prosafe.org)  
Phone: +32 2 8080 996

Torben Rahbek  
Email: [torben.rahbek@prosafe.org](mailto:torben.rahbek@prosafe.org)  
Phone number: +45 2871 7420

With best regards,

A handwritten signature in blue ink, appearing to read 'N. Olie', enclosed in a blue oval.

Nicolaas Olie  
*Executive Director*