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vores bureau 

Energy Efficiency Compliant Products - EEPLIANT3 [GA: 832558]

WP 10 Ventilation Units

Questions and answers

Invitation for tender

EEPLIANT 3 - Laboratory Test Services

6. September 2021

Question1: Scope

Is the request only focused on the testing of the ventilation units according to the Energy Efficiency/Ecodesign directives?

Answer 1

The call is focused on testing residential ventilation units covered by Ecodesign regulation (EU) No 1253/2014 and Delegated regulation on energy labelling (EU) No 1254/2014.

Question2: Test period

The period of testing the RVUs is far too short for carrying out all tests. Our estimation is that it is only possible to test 50 % of the unit in the given period from mid October 2021 - February 2022. The laboratory will be fully booked in this period if 50 % of the 33 RVUs must be tested, assumed that every single test is going as planned without no problem or delays due to logistical, administration or technical issues.

What is EEPLIANTs position to this and is it possible to extend and reschedule the test period?

Answer 2

Indeed, it is a relatively large test task, and it is foreseen in the call for tender that it may not be possible to find one single test lab for the full test package. According to section 2 in the call for tender the contractor can accept more than one tender for the task, based on the tenderers' test capacity including the number of units they are able to test within a time frame.

Question 3: Max carry over - UVU

(Several questions on this subject with different wording, all answered below)

What is “Max carry over” regarding an UVU (Financial proposal Group 3)?

Measure and verify correctness		Commission Communication ³ article 2.2 and 3		
Max. internal leakage rate,	I (BVU, ducted)	Regulation 1253/2014 Annex I (7)		
Max. external leakage rates	I (BVU, regenerative heat exch., ducted)	Regulation 1253/2014 Annex I (8)		
Max <u>carry over</u>	I (<u>ducted</u> UVU)	Regulation 1253/2014 Annex I (9)		
Mixing rate	I (non-ducted BVU)	Regulation 1253/2014 Annex I (10)		
The airflow sensitivity to pressure variations at +20 Pa and -20 Pa;	I (non-ducted)	Regulation 1253/2014 Annex I (32)		

Answer 3

Unfortunately, there is an error in the call for tender documents. The items ‘Max carry over’ and ‘Max. external leakage rates’ shall be switched since ‘Carry over’ is related to the heat recovery system (HRS) and not relevant for UVU without a HRS, according to regulation 1253/2014, Annex IV Information requirements for RVUs:

“(o) declared maximum internal and external leakage rates (%) for bidirectional ventilation units or carry over (for regenerative heat exchangers only), and external leakage rates (%) for ducted unidirectional ventilation units”

Consequently, these fields in the documents shall be corrected as below and a corrected version of annex C will be uploaded:

Max. internal leakage rate,	I (BVU with heat recovery, ducted)	Regulation 1253/ 2014 Annex I (7) and IV (o)
Max. external leakage rates	I (BVU and ducted UVU, regenerative heat exch., ducted)	Regulation 1253/ 2014 Annex I (89) and IV (o)
Max carry over	I (regenerative heat exch. ducted UVU)	Regulation 1253/ 2014 Annex I (98) and IV (o)

Furthermore, it has come to our attention, that for alternating units the prEN 13141-8 suggests a calculation of the “carry back” (the alternative to carry over for alternating units) instead of measuring it. Therefore, no price is requested for testing of ‘carry over’ for rotary heat exchangers nor ‘carry back’ for alternating heat recovery systems.

The Annex C Financial Proposal will be updated accordingly.

Question 4: Accreditation EN13141-8

The current test standard EN13141-8 which covers non-ducted and alternating RVUs is not sufficient to carry out accredited test in according to the regulation 1253:2014 and furthermore to have an

accreditation regarding the test standard. Therefore, the test standard is under revision to improve the test methods. The date for the public of the final version is still unknown.

In the EPLIANT3 WP10 Annex B It is a requirement to be accredited according to the given test standard for alternating units. We doubt that any laboratory has an accreditation according to this standard and have the required experience of eco design test in last three years. Also seen in the light of the very low activity of the market surveillance authorities in this area. Our own laboratory has conducted test on these units, but only for manufactures, and only with accredited methods on parameters that also can be conducted acc. to other standards e.g., EN 13134-7 and ISO 5801, and not accredited on the specific points for this technology (Alternating and non-ducted RVUs).

We and other laboratories, we assume, are waiting for the final version to send the final apply for an accreditation regarding the new methods in the test standard.

In this connection we request that it is sufficient that the tests acc. to EN 13141-8 not are accredited but used methods referring to for example ISO 5801 are accredited until the PrEN 13141-8 is final and harmonized.

What is EEPLIANTs position to this?

Answer 4

We agree, that for the cases where the existing harmonized standards are not sufficiently developed, alternative best practice methods (like EN 13134-7 and ISO 5801, for alternating units) can be used, but they must be described in the tender.

We also agree that the test labs do not have to (and cannot) be accredited according to test standards that has not been subject to final approval.

Question 5: Prices

in Annex B ch. 4, e) Delivery.

“Delivered to the lab free og charge”. Free of charge for who? The lab or manufacturer or EEPLIANT3

Answer 5

Products are delivered free of charge for the lab.

Question 6: Price for carry over

Question	Reference	Explanation	Proposal for answer
Should the price for the "Max carry over" test be included?	Annex C Group 3 - Max carry over , Regulation 1253/2014 Annex I (9) (not #8 as indicated)	The listed test applies to rotary heat exchangers. According to the description (Call for Tenders, item 3, second paragraph, last sentence), only equipment with plate heat exchangers, excluding alternating units, is tested.	The price is included in order to be able to estimate the costs for future tests.

Answer 6

Referring to Question/Answer # 3:

- (8) and (9) has unfortunately been exchanged.
- Max carry over is not going to be tested, and no price is requested for this test.

Question 7: Maximum volume flow.

Question	Reference	Explanation	Proposal for answer
Is the maximum volume flow for both individual units to be checked?	Annex C Group 1 - Maximum flow rate, Declared value according to flow rate/pressure diagrams.	Two individual units are required to determine the thermal efficiency of alternating units. Practical experience has shown that identical individual units can produce different results in the ventilation tests.	Determine the characteristic curve and values for both devices.

Answer 7

Only one device should be tested. It's a random selection.

Question 8: External pressure difference

Question	Reference	Explanation	Proposal for answer
Is the external total pressure difference for alternating units to be determined for both individual units? Or should the test take place on only one individual unit?	Annex C Group 3 - External total pressure difference	see question #02	Specify the external total pressure difference for both individual devices. If in #02 the test is to be performed on both individual devices, then the pressure difference for both can also be specified here.

Answer 8

Again, only one device should be tested. It's a random selection.

Question 9: Sound power level

Question	Reference	Explanation	Proposal for answer
Do the values of the sound power levels for alternating units have to be determined and reported for both individual units? Or is it sufficient to measure one device	Annex C Group 1 - Sound Power Level	Two individual devices are required for testing alternating units. The question therefore arises as to which of the two individual devices should be measured acoustically and whether	In practice, a single device has been measured so far. We propose to keep this procedure. It is up to the test laboratory to decide which single device is used.

<p>in both directions (exhaust air mode + supply air mode)?</p>		<p>both individual devices must be measured. We do not have any knowledge about deviations, as they exist for the ventilation characteristics.</p>	
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Answer 9

Again, only one device should be tested. It's a random selection which.

Question 10: Verification of correctness (several questions on this are merged)

Question	Reference	Explanation	Proposal for answer
<p>How should the correctness be verified?</p>	<p>Annex C Group 2 - Verify correctness (general)</p>	<p>For the control factor, for example, demand-driven could be specified. Should a plausibility check be performed (e.g. whether a sensor is present) or should the function be checked (e.g. via a test setup)?</p>	<p>We suggest a plausibility check. A functional verification is partly very complex (e.g. filter change indicator) Some examples to illustrate : 2.1) Thermal bypass (BVU): just checking by opening the unit under test that the thermal bypass exist / No test to "activate it") 2.2) Visual filter change warning signal: just checked on the documentation and/or display that it exist / No test trying to "shut-off" the filter and see if the signal works</p>

Answer 10

Yes, it is correct, that only a plausibility check/visual check is expected and therefore to be priced.

Question 11

I can see in the “Declaration of honour” that there is written “Austrian Energy Agency”, but the WP10-leader is Landesamt für Mess-und Eichwesen Rheinland-Pfalz.

I can also not find “section 20 and 21” in the tender specification?

Do you want us to change the text accordingly?

<p>i) has provided accurate, sincere and complete information to Austrian Energy Agency within the context of this procurement procedure;</p>	<input type="checkbox"/>	<input type="checkbox"/>
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(6) Declares whether the above-mentioned person complies with the selection criteria as provided in the tender specifications (PLEASE TICK YES OR NO):		
SELECTION CRITERIA	YES	NO
a) It has the legal and regulatory capacity to pursue the professional activity needed for performing the contract as required in section 20 and 21 of the tender specifications;	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) It fulfills the applicable technical and professional criteria indicated in section 20 and 21 of the tender specifications.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Answer 11

Thank you for calling our attention to this.

We have prepared and published a new version of the Declaration to be used. Please find the new version here: www.eepliant.eu

The filename of the new version is:

“210825 EEPLIANT3_WP10_Call for Tender_ANNEX A Declaration of honour_revised_01”.

Question 12: Airflow for External total pressure difference

Test on Group 3 "External total pressure difference": Either 1253/2014 nor Commission communication 2016/C 416/01 precise the setting of the airflow rate (Q_{max} or Q_{ref}). To harmonize tests, what is decided on this Tender?

Answer 12

This is correct that the regulations are not so clear on that item.

For the WP10 call it has been decided to use Q_{ref} as being most relevant, both for the customers and the manufacturers and possible to enforce, since other test parameters like 'carry over', 'mixing', 'effective power input', etc. are tested at Q_{ref} .

Question 13: Price

As a remark, we well understand that Annex C is a template but for us, reading the call for tender:

Group 1: The 3 first items are 1 price (because one test).

Answer 13

Thank you for pointing the attention to this subject. It is correct, that since the electric power input has to be based on the reference airflow rate it is two sides of the same test. The Annex C will be amended to including the first three items of Group 1 for one common price field (see also Q&A # 13).

Question 14: Prices

For group 3, all tests are in combination with group 1 tests.

For group 2 tests, it seems to be possible that these tests are ordered in combination with group 1 tests OR as a single test.

- If it is ordered in combination with group 1 tests, test sample handling, reporting and so on is almost done and therefore the costs will be low
- If it is a single order, test sample handling, reporting and so on must be considered as additional cost and will raise this single prize of course.
- In order to optimize the cost structure it will be necessary to clarify this point and/or ask for two different prizes

Answer 14

Indeed, both the group 2 and the group 3 tests are meant to be performed in combination with group 1 tests and will not be ordered as stand-alone tests.

Question15: Prices

For group 1 tests, it seems to be possible that some parameter might be ordered separately.

- If e.g. SPI and thermal efficiency is ordered, some of the other values are already determined as it is necessary to check the max flow in order to check the reference flow or to find the correct setting for reference flow.
- If e.g. Sound power level is only ordered, it is necessary to check the max flow in order to check the reference flow or to find the correct setting for reference flow nevertheless.
- If sound power level is ordered in combination with SPI and thermal efficiency, the costs for sound power will be much lower.

In order to optimize the cost structure it will be necessary to clarify this point and/or ask for two different prizes

Please consider, that for all of the single tests the base costs for test sample handling and reporting are often much higher than the single test.

In case of combined tests, the costs can be reduced significantly.

Answer 15

Regarding 'Maximum flow rate' and 'Reference flow rate', for market surveillance purpose we must use the declared values of the 'Reference flow rate' as the basis for the measurements.

It is the understanding of the WP10 group that consequently the 'Maximum flow rate' is not necessary to test, hence it should be an optional parameter.

The tests for 'Maximum flow rate' and for 'Sound power Level' will only be requested together with SPI and Electric power input and not as stand-alone tests and this shall be the basis of the tender (see also Q&A # 13).

Question16: Deadline and timeline

At Call for Tender doc at:

Page 1:

Important deadlines

Wednesday 4th August 2021]:

Call of tender published on eepliant.eu, prosafe.org and voresbureau.dk

Wednesday 1st, September 2021, 17:00 CET:

Submission of questions about the call

Friday 3rd September, 14:00 CET:

Final Q&A to be published

Thursday 9th September 2021 EOB:

Deadline for submission of tenders.

Tender documents

Page 10:

11. Timeline

1. Call for tender published on EEPLIANT3 and vores bureau websites on Tuesday 10th August 2021.
2. Deadline for submission of questions about the specifications: Thursday 2nd, September 2021, 17:00 CET.
3. Final Q&A to be published on Monday 6th September, 14:00 CET.
4. Deadline for submission of tenders: Friday 10th September 2021, 17:00 CET.
5. The tender must be written in English and sent to the office of vores bureau via email at tender@voresbureau.dk AND eepliant3@prosafe.org; with the subject header 'EEPLIANT3 WP10

AND at homepage:

Interested laboratories should submit the electronic tender including all required documents by 17:00 CET on Thursday 9 September 2021 via email to tender@voresbureau.dk and info@prosafe.org with the subject header '[name of the laboratory] WP10 Tender'.

More detailed information regarding the WP10 call for tenders is provided within the formal Call for

Could you please confirm which would be finally valid.

Answer 16

Thank you for bringing our attention to these errors.

The correct deadline is the Friday 10th September 2021, 17:00 CET

Additionally, the correct date for the final Q&A is Monday 6th September, 14.00.

The call for tenders document and the home page will be updated and uploaded in a new version according to this.

Question17: Declaration of Honour

I feel a bit unsecure about the English language when the question is negative...of course we have not distorted competition by being previously involved.

Should we then tick “Yes, we have not (that is true) distorted competition

Or should we tick “No, we have not (also true) distorted competition?

(4) Declares whether the above-mentioned person is in one of the following situations or not (PLEASE TICK YES OR NO):		
GROUNDS FOR REJECTION FROM THIS PROCEDURE	YES	NO
h) has not distorted competition by being previously involved in the preparation of procurement documents for this procurement procedure;	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) has provided accurate, sincere and complete information to vores bureau within the context of this procurement procedure;	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Answer 17

Thank you for your mail. We do agree that h) is a bit tricky because the question is “negative”.

If you have not distorted competition by being previously involved, you should tick “yes” in the declaration.