

Minutes of the Progress Meeting

Project N° ENK5-CT2002-80648 Tar Measurement Standard

Location: VTT - Biologinkuja 5- Otaniemi
02150 Espoo
Finland
Time: 14.00-18.00

Project participants present:

B. Coda	ECN
J. Kiel	ECN
H. v.d. Hoek	NEN
M. Suomalainen	VTT
U. Zielke	DTI
T. Liliedhal	KTH
J. Good	Verenum
P. Simmell	VTT
H. Knoef	BTG

Absent:

EMC
NOVEM

Other invited parties:

C. Unger Fraunhofer UMSICHT

Opening

The minutes of the kick-off meeting are approved. All the actions points listed in the minutes have been done and also the deliverables that were due for the end of the first period (31st of May, 2003) have been submitted.

Project co-ordination activities

B. Coda gives a presentation on the activities undertaken so far:

A number of external technical Experts have been invited by email to join the activities of R&D (especially Round Robin Test, RRT and parallel measurement campaign) and the Standardization work of the CEN/BT/143. Different parties in Europe (universities, research organisations) have positively answered to the invitation. Some of them have participated also in the RRT; for many of them, participation in the follow-up activities will be dependent on budgetary issues.

- NEN has issued the official call for participation to CEN/BT/TF 143. This call was aimed to invite the technical experts in the field to become official national delegates (representatives of their country in the activities of the CEN/BT/TF143). All the project participants are members of the delegations, with the exception of Verenum (Switzerland- not yet official) and EMC (United Kingdom). C. Unger, from Fraunhofer UMSICHT has become national

delegate of Germany, while Prof. Corella from Spain has expressed his interest to participate but he has not become official delegate yet. It is recognized that is very important to attract further participants, especially as far as the CEN/BT/TF 143 consists. How to attract further participation will be discussed in the official meeting of the CEN/BT/TF 143.

- An article to advertise the activities of the “Tar Measurement Standard” Project has been written for the Gasnet Newsletter (ECN).
- A letter to advertise the activities of the “Tar Measurement Standard” Project has been written for the Gasification Mailing list (ECN).
- The web-site www.tarweb.net has been updated by putting recent information on the start of the project and the latest version of the Guideline (3.3); also the presentation given by John Neeft at the Biomass Conference in Amsterdam. It is agreed that a regular updated of the web page is needed in order to attract possible end users of the Guideline; the web page contains currently still old information concerning the old ‘Guideline’ project. First input on changes of the web-site will be given by the co-ordinator (**Action ECN**).
- In occasion of the next EC Biomass contractor’s meeting that will be held in Budapest in October 2003, two synopsis have been written, one for the ‘Tar Guideline’ and one for the ‘Tar Measurement Standard’ project. ECN will participate as coordinator of the two projects in the meeting. Project partners who are willing to come to Budapest can do it (max. one participant per project).
- Steve Deutch, from NREL, US has been contacted to inform him about the status of the new project and on the ongoing Standardization activities. He was asked to provide information about possible specifications and requirements that are needed in the US (ASTM) for such a measurement method to become a Standard. So far ECN has received no reply on the subject. It is recognized that is very important to estimate the requirements that the Standard has to obey. Since there are not for the CEN Standard, it is important to find out the requirements that apply for similar Standards (e.g. ISO, ASTM) to provide comparable level of Standard, and to facilitate in the future a possible revision of the actual standard.

Presentation of scientific results:

First part of the Round Robin Test (DTI) –Discussion

DTI, co-ordinator of the RRT, gives a presentation on the results of the first round of the RRT.

The main results are:

- 10 laboratories committed themselves to participate in the tests and received the samples.
- Out of 10 participants, 6 have sent their results, one has withdrawn from the RRT and the results from 3 laboratories are still missing.
- From the received results it is clear that 3 labs made analysis very close to the correct values, on the whole their results are within the 95% Confidence of Interval (C.I.). 3 laboratories are outside the 95% C.I. for 5 or more compounds. In some cases it might be due to a systematic error. In some others errors might be due to miscalculations.

One of the major points of the discussion is that the chapter in the Guideline related to the GC analysis is perhaps still to imprecise, and following the procedure as it is now described in the chapter may leave too much flexibility to the user, and therefore leading to wrong analysis

results. The project participants will ask experts analysts in their group about their opinion on the current chapter of GC analysis in the Guideline report and eventually modify and/or re-write it.

DTI also expresses that he will contact the laboratories that have not performed well in the first round of the RRT to ask about the reasons why. It is expected this may lead to improvement of the performance of the laboratories in the second part of the RRT. After this clarification, an ultimate decision about how many and which participants to include in the second round of the RRT will be taken.

Action points – Timetable of the second part of RRT

- Begin July 03: Announcement of RRT 02 (**DTI**)
- July 03: **DTI** and **UMSICHT** will take samples from gasifiers for gravimetric and GC analysis
- 31 July 03: Deadline for sending out the expression of interest in participating the tests (**all invited laboratories**)
- August: Preparation of the samples (**DTI**)
- 13 August: Forward the samples to the participating laboratories (**DTI**)
- 19 September 03: Deadline for receiving the results (**all laboratories**)
- October 03: Evaluation and possible revise of the results
- Nov.03: Report of RRT round 01 and round 02 (**DTI**)

R&D plan

VTT gives a presentation for the R&D plan according to the report-deliverable D4- that was sent out at the end of May. So far all the project participants have not expressed changes in their R&D plan.

Discussion

- it would be good to introduce as R&D topic also the performance of the Guideline method at high water content in the producer gas (e.g. steam gasification), thus addressing the problem of the dissolution of the water in the solvent (isopropanol)
- Definition of the exact duration time of the Soxhlet extraction to keep the duration time limited is necessary
- Gravimetric tars: Aerosol salts might be captured in the impinger bottles. If a proper analysis is not performed, they could interfere with the determination of the gravimetric tar.

Other results

Verenum is going to measure tars in both clean and raw gas in their Xylowatt downdraft gasifier and will report about this experience in the next period.

Parallel measurement campaign: organisational issues

The possibilities to receive external funds for the parallel measurement campaign are quite limited for all the project partners. DTI may apply for national funds in Denmark, as well as ECN and BTG in the Netherlands. For the other partners possibilities are limited. Therefore the first big obstacle to overcome is the lack of funding.

Other issues that may play a critical role are the location of the measurement campaign (which may save the travel costs, VTT), and also co-financing (UMSICHT).

Possibilities to apply for European funding in the framework of the program 'Intelligent Energy for Europe' have been discussed with European Commission (ECN), but they seem

rather limited. Other possibilities of applying for funding under the 6th FP (as concerted actions or specific support actions) will be sorted out (action ECN).

In addition to that, the other partners that have expressed interest (including different universities) will be re-contacted (action ECN).

Administrative and Financial issues

ECN will send before the end of July the first management report to the Commission. For this 4-page report no contribution from the partners is expected. The first-year progress report will be sent out before the end of 2003, as well as the first cost statement declaration.

Other issues

It is proposed that ECN will host both the next project meeting and the next parallel CEN/BT/TF 143 meeting. The date will be 27th of November, followed by the CEN/BT/143 meeting the following day.