

**VALIDATION
TRACEABILITY
MEASUREMENT UNCERTAINTY
CHALLENGES FOR THE 21ST CENTURY'S ANALYSTS**

Workshop group 2.2:
**The role of Proficiency Testing
and Interlaboratory Comparisons**

Convener: Lorens Sibbesen
Rapporteur: (... same as convener)



Workshop group 2.2 – participants:

- Afyon, Osman-Muzaffer (TR)
- Bidmon, Clemens (D)
- Demircioglu, Hulusi (TR)
- Helbich, Hans-Martin (D)
- Hentschel, Andreas (D)
- Horn, Wolfgang (D)
- Kaptan Karabinar, Ilgi (TR)
- Kemmlein, Sabine (D)
- Kooistra, Hielke (D)
- Möller, Thomas (D)
- Müller, Hans-Thomas (TR)
- Nica, Daniela (RO)
- Öztürk, Turgay (TR)
- Pikkarainen, Anna-Liisa (FIN)
- Randa, Bohdan (CZ)
- Simon, Iveson (UK)
- Skrzypczak-Zbiciak, Kamila (PL)
- Stoyke, Manfred (D)
- Yesiloz, Recep (TR)

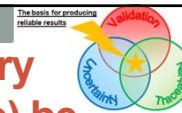
WG 2.2 questions

- a. Can participating in an interlaboratory comparison (e.g. a relevant PT scheme) be used as an element in an “in-house” method validation study?
- b. Do you find the availability of relevant and accessible PT schemes sufficient to your needs of documenting analytical quality?
- c. Does your (accredited) laboratory feel an over-emphasis from the Accreditation Body on the importance of participating in PT schemes (... even of less relevance)?
- d. Does your laboratory follow this practice:
“The laboratory should define its level and frequency of participation after careful analysis of its other QA measures (especially those that are able to disclose, quantify and follow the development of bias of a stated magnitude)....”??
(Re. EA-4/18:2010, “Guidance on the level and frequency of proficiency testing participation”)
- e. Does your laboratory ever document traceability based on participation in PT schemes?
- f. Does your laboratory take information from participation in a PT scheme (e.g. a continuous scheme with several rounds) to your estimation of measurement uncertainty?
- g. Is the quality (incl. appropriateness) of existing PT schemes (accredited or non-accredited) acceptable?
- h. Does your laboratory ever take initiative to arrange interlaboratory comparisons?

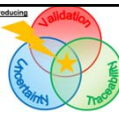


a) Can participating in an interlaboratory comparison (e.g. a relevant PT scheme) be used as an element in an “in-house” method validation study?

- ILC used as part of MV (emission testing)
 - Difficult to find reference materials
 - Also internally among technicians
- Comparing of data in the validation phase (food & feed; Mycotoxins)
- Option if possible!
- Difficult to find relevant schemes
- Arranging specific ILC for the purpose of MV
- Request for proving data being comparable as part of MV
- Often relevant for verification purposes



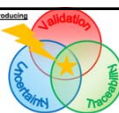
The basis for producing reliable results



a) ...cont.

- Evaluating "qualitative values"
- "Post-evaluation" tool for evaluating robustness
- AB recommend use of ILC for inhouse validation
 - Following the requests in ISO/IEC 17043
- In-house comparisons in big organizations

The basis for producing reliable results



b) Do you find the availability of relevant and accessible PT schemes sufficient to your needs of documenting analytical quality?

- Difficult for the very specific tests (air emission, odour, chemicals for electro-plating, very special chemicals...)
 - But still requested by the AB!!
- Unwilling to share productions secrets!
- Need of schemes for sampling
- Character of samples not relevant for the routine testing

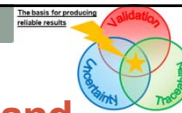
c) Does your (accredited) laboratory feel an over-emphasis from the Accreditation Body on the importance of participating in PT schemes (... even of less relevance)?

- Urge to participate more frequently!!
 - But mostly not possible!
- Prove quality of performance over several rounds!
 - Incl. blind samples!
- Difficult to find good samples with a well-documented assigned value (incl. the MU!)



d) Does your lab. follow this practice: “The laboratory should define its level and frequency of participation after careful analysis of its other QA measures (especially those that are able to disclose, quantify and follow the development of bias of a stated magnitude)....”??

- Also considering different purposes of ILCs (e.g. blind samples)
- Link between ILCs and Internal Control?
- Must be followed up by IC (for proving ongoing quality)
- Also a question of effort and costs
 - Making priorities!
- Finding the right “excuses” for not participating!!



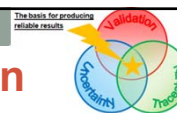
e) Does your laboratory ever document traceability based on participation in PT schemes?

- NO!
- Maybe!!!
 - Better than doing nothing!
 - Must never replace "real" documentation of traceability
 - Empirical methods! ?
- Recovery!! (on spiked samples)



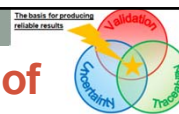
f) Does your laboratory take information from participation in a PT scheme (e.g. a continuous scheme with several rounds) to your estimation of measurement uncertainty?

- Yes!
- Also giving information on any u(bias)
- Must be frequent schemes (> 6 times per year)
- Also evaluation of uncertainty estimations



g) Is the quality (incl. appropriateness) of existing PT schemes (accredited or non-accredited) acceptable?

- [not discussed specifically; partially in relation to other questions]



h) Does your laboratory ever take initiative to arrange interlaboratory comparisons?

- Yes (reference laboratories)
- Yes – on special tests
- Yes – in case of use of subcontractors, who are not accredited
- Based on complaints – to investigate the reason

