



Eurachem

A Focus for Analytical Chemistry in Europe

10th PT/EQA Workshop - Windsor 2023

Report from WG2



Guidance on different methods for setting the standard deviation for proficiency assessment (SDPA)

- Convenors:
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WG2 group composition

- 42 participants
- majority: PT Organisers
- 4 PT Participants
- 3 from ABs
- Clinical, food, environment...



Appropriateness on method to set the SDPA/1

- Which method is chosen most frequently in specific areas of testing?
 - all 5 well in use
 - providers use multiple ones in their schemes
 - Perception of experts: medical, chemistry...
 - Previous rounds: microbiology, chemistry...
 - General model: food, cosmetics, chemistry...
 - Repeatability/reproducibility: chemistry, oil/petrol...
 - Same round: microbiology, oil/petrol...



Appropriateness on method to set the SDPA/2

- Which method is most effective in specific areas of testing?
 - Previous rounds and repeatability/reproducibility most welcomed
 - Same round: not so reliable
 - General model: update is needed (decades of data from all over the world)
 - Depends also on nr of participants



Appropriateness on method to set the SDPA/3

- Does ISO 13528 give sufficient guidance to the use of the representative method? If „No” what further advice is required?
 - YES!! But...
 - Happy to have more examples



Appropriateness on method to set the SDPA/4

- Are additional methods required or available?
 - Not too familiar with other options
 - when PT item is a RM
 - advantages and disadvantages more elaborated
 - SDPAs remaining unchanged for years/decades??



Availability of information to set the SDPA/1

- As a PT/EQA provider, do you have access to enough information to set a reliable SDPA according to the methods listed in ISO 13528 or guidance in other documents?
 - YES!! 13528 well written
 - more examples would be welcome!
 - statistics: sometimes daunting (right application of formulae)
 - more training or employment of a statistician



Availability of information to set the SDPA/2

- As an accreditation body, do you have access to sufficient information to evaluate the reliability of the SDPA chosen by the PT/EQA provider?
 - Yes, but...
 - experience of AB is more important
 - should ask provider for WHYs!!!



Availability of information to set the SDPA/3

- As a PT/EQA participant, do you understand how the PT provider has set the SDPA?
 - YES – NO - Depends on provider
 - Participants don't care much in general



Limit for SDPA when derived from data obtained in the same round of a PT scheme/1

- Should this be a requirement (shall) or a recommendation (should)?
 - 'should' by majority
 - not much experience in this regard



Limit for SDPA when derived from data obtained in the same round of a PT scheme/2

- As a PT/EQA provider, do you have sufficient information to be able to set such limits?
 - **NO!!!**
 - More guidance needed – with examples



Limit for SDPA when derived from data obtained in the same round of a PT scheme/3

- As an accreditation body, do you have sufficient information to evaluate the reliability of the limits set by the PT/EQA provider?
 - **NO!!!**
 - More guidance needed – with examples



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**Thank you to all WG2 participants
for their contribution!**