



**Eurachem**

A Focus for Analytical Chemistry in Europe

# **10<sup>th</sup> PT/EQA Workshop - Windsor 2023**

Report from **WG-06**

*Risk analysis approach  
for PT/EQA participation*



## WG-06 Risk analysis approach for PT/EQA participation

- **Convenors:**
  - Piotr ROBOUCH (EC-JRC, EU)
  - Monika HORSKY (IAEA, Austria)
- **37 Participants**
  - 34 PT providers
  - 5 NAB
  - 6 Technical assessors
  - 10 PT participants
  - 0 other



## 1. Main risks & opportunities (R&O) related to participation to PT/EQA

- Wrong evaluation due to poor homogeneity and/or stability
- Assess bias
- Validate uncertainty estimates
- Confirmation/demo of validated method
- Surveillance of methods
- Evaluate performance / Competence demonstration
  
- Identification of training needs
- Availability of sufficient resources (budget/staff)
- Timing of sample dispatch
- Delays in sample receipt due to customs (or “blocked @ gate of the institute”)
- Risk of over/poor interpretation of competence based on one sample/analyte level
- Not treating PT sample the same as routine, knowledge of patterns in analyte levels ... (influence?)
- Risks related to NO participation: no identification of trends, bias, ...



## 2. Has the new risk-based approach of ISO/IEC 17025 changed the way that laboratories participate in PT/EQA?

- Increase and/or decrease in level/frequency of participation is possible
- (minimum) requirements depend on AB policies
- Risk analysis may reveal selection of inappropriate PT
- Risk-based approach (preventive) promotes use of (other?) PTs
- Increased use of surplus PT materials
- Organization of specific local PTs (when no other dedicated PT is available)
- More or less collusion?
  - Possibly less: when risk-based approach leads to fit-for-purpose PT participation.
  - More prone: when risk of losing business in case of failure
- Risk that proposed frequency (reduction) is not accepted by the customer or the AB



## 3. Does EA/4-18 G: 2021 [1] give sufficient guidance to labs in addressing R&O associated with the level and frequency of participation in PT/EQA?

- Very little guidance provided
- linked to frequency
  
- Risk-based approach empowers laboratories to decide about frequency/level
  - Increased engagement by labs to participate to relevant PTs

Note1: ILAC P9:06/2014 – currently under revision,  
to include EA 4/18 in the annex

Note2: ISO 15189 – PT participation is used as an indicator

[1] EA/4-18 G: 2021 “Guidance on the level and frequency of proficiency testing participation”





## 4. Does the Eurachem Guide [2] give sufficient guidance to laboratories in addressing R&O associated with the selection of the PT/EQA?

- Risk of “unawareness” of available guides
  - Use of guidance not obligatory but helpful to understand what assessors are looking for
  - Guidance documents can support proper identification of major risks and providing justification of decisions taken

[2] “Selection, Use and Interpretation of Proficiency Testing (PT) Schemes” (Ed.3, 2021)





## 5. Further guidance required?

- Cf. “Risk analysis approach for PT participation”, by Ian Mann
- Wish for guidance related to ISO 17043 risk management “implementation” (future EEE leaflet?)
- Cf Risk management (17025-43) @ IZVe, by Paola Carnieletto