



## **9<sup>th</sup> PT/EQA Workshop - Portoroz 2017**

### **Working Group 1**

**Consider what is understood to be interpretative PT/EQA schemes and to review their importance along with the challenges of organising such schemes**



- **Convenors:**
  - Ulla Tiikainen (LabQuality, Finland)
  - Tracey Noblett (LGC,UK)
  
- **Contributors:**
  - 80+ participants
  - Divided into 5 groups for better organisation
  - 34 countries represented including many non-European including Singapore, Tanzania, USA, Myanmar, Botswana, China, Canada, Australia, Georgia, Indonesia, Ethiopia, Palestine, New Zealand



- Contributors:
  - Accreditation/regulatory bodies
    - CNAS, Slovenian AB, ENAC
  - PT providers
  - PT participants
  - Other interested parties;
    - independent consultants
    - suppliers
    - National bodies e.g. food agencies, public health, measurement institutes



### The Correct Word?

Interpretative 70%

or

Interpretive 25%

or

Doesn't matter 5%



## Definition

Selection, Use and Interpretation of Proficiency Testing (PT) Schemes – Second Edition 2011

Section 4.2 - c)

Interpretive: no measurement is involved;

The PT item is a measurement result, a set of data or other set of information concerning an interpretative feature of the participant's competence.....



## More definitions

- Competence that is subjective
- There is no clear wrong or right answer



## Q1 - What is understood to be an interpretative PT/EQA scheme:

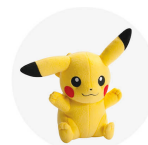
- What types of PT/EQA scheme exist?
- What sectors are they used in?
- Why are they important?



## Examples of schemes/sectors

### TOYTEST - Consumer safety

Participants receive a toy or a picture of a toy. They then have to interpret which clauses of the standard should apply e.g flammability, small objects, noise, toxic paint.



CLINICAL – Case scenario for illness or slide containing cells (histopathology)

FORENSIC – scene of crime, blood toxicology, fingerprints

## Examples of schemes/sectors

SENSORY – Smell or taste of products

SAMPLING – field of crops to see if can detect disease

CARGO SHIPS – to test inspection procedures

### What sectors are they used in?

Mainly applied in:

- Clinical
- Medical
- Forensic

But can apply to any sector, as seen in examples,  
also food, microbiology,



## Importance

- Educational
- Available when actual samples are difficult to obtain, e.g. rare illnesses
- Suitable when actual samples are very costly
- Suitable for samples that are difficult to transport e.g. very large or not stable
- To improve quality
- When result is critical e.g. life or death



## Q2 - What challenges do such PT/EQA schemes present:

- To the PT/EQA provider?
- To the accreditation body?



## Q2 - What challenges do such PT/EQA schemes present:

To the PT/EQA provider?

- Use of experts, may have 2 experts and 3 opinions
- Results are subjective
- How to choose experts and how to qualify
- May be lack of experts in the field, using same experts may bias results
- Who and how to set criteria for performance
  - Simple good or bad result or range of scores



## Q2 - What challenges do such PT/EQA schemes present:

To the PT/EQA provider?

- No guidance for scoring, not normalised
- Results may depend upon methods used, different methods may give different interpretations
- Regional differences
- Language issues & translation
- Consequences need to be considered
- Cost & affordability (cost of experts)



## Q2 - What challenges do such PT/EQA schemes present:

To the PT/EQA provider?

- Time-consuming, cannot use Excel to assess data, need to read them all
- Presenting results in a concise format



## Q2 - What challenges do such PT/EQA schemes present:

To the accreditation body?

- Providing third party experts
- Ensuring consistency across tests
- Assessors must be open-minded to different interpretations of results
- What standards can assessors apply? All schemes use different criteria
- Not the usual stability and homogeneity questions





## Q3 - How is performance evaluated in such PT/EQA schemes:

- What is used as the assigned value?
- Are performance scores used?
- What type of acceptance criteria is used?



## Performance

- Model answer, degree of agreement with panel
- May score by % closeness to model answer
- Points may be awarded e.g for using certain key words
- Expert answer is the only choice
- Consensus of results dangerous as may be based on wrong information



### More performance

- Performance based on risk analysis, how importance is the wrong analysis, may be life or death choices
- Use score sheet with guidelines given to participants
- Can give assigned values if numerical calculations
- Also if result may be known, e.g. comparing finger-prints or items from same source



### **Q4 - How are the metrological traceability and uncertainty requirements of ISO/IEC 17043 addressed in such PT/EQA schemes?**

Not a quantitative test

No measurement carried out

Therefore not sure if measurement uncertainty & traceability can be applied

May be applicable to the initial test material and may need to be considered by participant

What do accreditation bodies think?



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**Thank you to all contributors for a lively and constructive discussion and for doing most of the work 😊**