



Department for  
Business, Energy  
& Industrial Strategy

Office for Product  
Safety & Standards

## **CTSI Professional Competency Framework, CPCF**

### **Legal Metrology Oral Examiners' report for June 2022**

#### **The Orals**

The Orals followed the same format as last year with four test stations set up around the room, each station representing an area of expertise as follows:

- NAWIs (retail, medical, weighbridges)
- Capacity Serving Measures, length measures, intoxicating liquor measuring instruments
- AWIs, packaged goods
- Water meters, fuel dispensers, LPG, road tankers

All four stations this year were relatively well answered by candidates with an area of strength being demonstrated in the technical area of NAWIs and with some / several candidates lacking knowledge in other areas.

A total of 14 candidates did the Oral in June 2022.

The pass mark for the Oral remains set at 40%. The results for the 2022 Oral examinations are as follows;

W+M Oral: Two candidates failed their Oral exams this year.

In the Orals, the lowest mark awarded was 36% and the highest 75%.

## **Strengths and weaknesses per station**

### **NAWIs (retail, medical, weighbridges):**

Areas of strength (all or most candidates provided satisfactory answers):

- Markings on a NAWI.
- Tests to conduct on initial verification.
- UKCA mark.
- Accuracy classes and their intended use.
- 2016 regulations.
- MPEs.
- Medical NAWIs.

Lack of knowledge/understanding (some or most candidates provided incorrect or incomplete answers):

- Scenario question – replacement of POS on checkout scales.
- Conformity assessment procedures (e.g. B+D).
- Substitution material procedure for weighbridges.
- Compatibility of modules between indicator and load cells.
- Information found in a Type Examination Certificate.
- Who can carry out a requalification.
- 2000 regulations.
- Stickers (red M, Crown...).

### **AWIs, packaged goods:**

Areas of strength (all or most candidates provided satisfactory answers):

- Packaged goods regulations, test methods.

Lack of knowledge/understanding (some or most candidates provided incorrect or incomplete answers):

- Unaware of dispensation letters and why they are used.
- Confusion over the use of dynamic axle weighers and whether they are prescribed, candidates said they are responsibility of Department for Transport.
- Very little knowledge of rail in motion, continuous totalisers, discontinuous totalisers, filling machines.

### **Capacity Serving Measures, length measures, intoxicating liquor measuring instruments:**

Areas of strength (most candidates provided satisfactory answers):

- Beer meter capacity deliveries (1/3 pint, 1/2 pint etc).
- Markings on a Spirit Measuring Instrument and "thimble" misuse i.e. prescribed spirits & capacities of Spirit Measuring Instruments, including mixed sizes in bars
- EU markings of Capacity Serving Measures.

- Capacity Serving Measures e.g. line / brim (some candidates required prompt).
- Tests to conduct on initial verification.
- "Aware" of UKCA mark.
- MPEs.
- Bottle top pourer not to be used for prescribed spirits.
- Some candidates aware of issue with Pernod.

Lack of knowledge/understanding (some or most candidates provided incorrect or incomplete answers):

- Scenario question – failure of beer meters to meet MPE immediately prior to large event.
- Operation (general) of the different beer meters.
- Incorrect markings on beer tower.
- Who can carry out a requalification (e.g. manufacturer if authorised) / conformity assessment procedures (e.g. understanding of the Approval / Certificate(s)).
- Coloured lens on Spirit Measuring Instrument.
- EU markings of Capacity Serving Measures / Material Measures of Length.
- EEC markings on Material Measures of Length.
- Postal gauge (place of use of guide and gauge).

#### Water meters, fuel dispensers, LPG, road tankers

Areas of strength (most candidates provided satisfactory answers):

- Identification of key component parts and flow of fuel through the liquid fuel dispensers and how to test them.
- How the tests differ for a standard temperature accounting when testing a liquid fuel dispenser and awareness of the guidance for such testing.
- Identification of the water meters and regulations applicable to them.
- Difference between top and bottom loaded bulk fuel tankers.
- Identification of marking requirements for a bulk fuel meter measuring system including UKCA.
- An understanding of hose dilation and hose retention on bulk fuel meter measuring systems and applicable tests for these.
- Identification of the working standard metal capacity measures and ability to explain the difference between brim and line type and awareness of WM 7000 series of standards.

Lack of knowledge/understanding (some or most candidates provided incorrect or incomplete answers):

- Ability to identify non prescribed measuring equipment such as LPG dispensers and limited knowledge in how to approach complaints of short measure from such equipment.
- Difference between Weights and Measures Act Section 12 type approval certificates and EU/UK Type examination Certificates.
- Difference between Test Certificates and Type Examination Certificates

- Some struggled with conformity assessment procedures.
  - Some struggled with the identification of the bulk fuel tanker dipstick and requirements applicable to it.
- General awareness of powers, offences and defences when approaching a scenario question.