



Office for Product Safety & Standards

CTSI Professional Competency Framework, CPCF

Legal Metrology Oral Examiners' report for June 2024

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:

- Station 1: CSMs, tapes (length), beer dispensers
- Station 2: Water meters, fuel, LPG and road-tankers
- Station 3: NAWIs and weighing
- Station 4: AWI weighing, packaged goods

All four stations of this session were relatively well answered by candidates with Station 3 being the best answered, Stations 2 and 4 were answered next best and Station 1 was answered the weakest.

Examiner feedback:

Station 1: CSMs, tapes (length), beer dispensers

Overall, the items at this station were generally well identified. Most candidates were confident in discussing the prescribed quantities for intoxicating liquor, and able identify the correct regime that applied to the instrument or equipment at the station. Generally a higher level of competence was demonstrated with equipment where the Measuring Instrument Regulations 2016 applied.

It was a common theme that candidates struggled to accurately recount the full name of relevant applicable legislation and the associated year in relation to spirit and beer measuring instruments, and regarding the sale of intoxicating liquor.

Most candidates were able to identify beer measuring instruments as 'beer meters' however many struggled to identify one or more of the different types of meter at the Station. Candidates were however more confident in identifying test methods and establishing practical solutions to non-compliance in relation to these instruments. Some

candidates however were uncertain of how to address hypothetical challenges from business owners: suggesting they were unaware or unfamiliar of some of the specific legislative provisions that enable Inspectors to undertake their role effectively.

Questions regarding capacity serving measures were generally answered well, with candidates able to demonstrate an understanding and talk confidently about the types of measure, applicable legislation and essential requirements. It was noted that only a handful of candidates were able to identify the relevant legislation to crown stamped capacity serving measures <100ml.

Candidates demonstrated a good understanding and ability to identify the relevant legislation applicable to material measures of length, most spoke confidently about what to look for upon visual inspection, how to test, and how the essential requirements applied.

Questions regarding use of enforcement powers were generally answered with good consideration, and with proportionate responses when asked how they would act in response to a non-compliance. More specific terminology and explanation of the enforcement options available to Inspectors would have received higher marks: for example, when stating they would 'serve a notice': describing the type of notice by name (i.e. a 'compliance notice') and stating what steps they would require of the economic operator to comply with the compliance notice would have been advantageous.

Station 2: Water meters, fuel, LPG and road-tankers

Areas of strength for candidates were:

- Identifying tanker dipstick measuring systems, relevant regulations and explaining their operation.
- Identifying tanker meter measuring systems, the regulations and explaining what tests they would carry out.
- Explanation of conformity markings on a tanker data plate.
- Identification of key component parts and flow of fuel through a fuel dispenser. Knowledge of test procedures and tolerances.
- Explaining how standard temperature accounting works in practice, including what reference documents to rely on.
- Explaining the calibration of working standard metal contents measures with reference to the correct specification.
- Identifying water meters, explaining conformity markings and tracing the flow of water through the meter.
- Good knowledge of OIML recommendations that apply for different instruments.
- Demonstrate understanding of what powers Inspectors could utilise within the Consumer Rights Act.

Areas for improvement:

- Ability to explain what information is needed on the tickets issued by a tanker meter measuring system and what regulations set it out.
- Ability to explain hose dilation and hose retention and how to test for these in relation to a bulk fuel meter measuring system.
- Referencing the 1995 regulations as applicable for a Fuel Dispenser marked with a UKCA mark.
- Ability to explain the difference between a Weights and Measures Act Section 12 Pattern Approval and a Measuring Instruments Regulations Type Examination Certificate.
- Ability to describe how they check if an Approved Verifier was permitted to affix a re-qualification mark to an instrument or not.
- Knowledge of maximum permissible errors on water meters or where to find them.
- Knowledge of LPG dispensers or what offence exist on short delivery.
- Demonstrate confidence to disqualify an instrument causing consumer detriment, some candidates were happy to allow a non-compliant instrument to continue to be used in trade.
- Ability to explain the difference between Module D and Module F conformity assessment routes.
- Unable to explain what powers exist for Inspectors within the Measuring Instruments Regulations

Station 3: NAWIs and weighing**General comments:**

Most candidates demonstrated good knowledge in relation to Non-Automatic Weighing Instruments [NAWI], weighing principles and weights. There were several standout candidates whose scores reflected an advanced level of understanding of the subject. It was evident that some candidates had more practical experience which had enabled them to complement and consolidate their theoretical knowledge. Some candidates appeared to have learnt the theory but could not confidently translate this into practice.

Strengths:

- Able to Identify the NAWI's at the exam station and the situations where they were likely to be found.
- Differentiating between Classes of instruments and likely uses.
- Identifying the relevant regulations and other guidance documents that can be referred to when assessing equipment.

- Explaining how to assess a NAWI including markings that should be present and test for accuracy, hysteresis, eccentric loading, repeatability etc.
- Identification of different types of loadcells and explaining how they work.
- Describing the practical testing of a weighbridge including substitution.
- Consideration and discussion around whether prior notice under the Consumer Rights Act 2015 was required for the complaint scenario. Some candidates also referred to their own LA enforcement policy.
- Most candidates explained that they would refer to the Weights Regulations 1986 to assess the suitability of a weight.

Recommendations:

- Use the 2 minutes to pick up the equipment and study any documents.
- Application of NAWI MPEs in a practical situation, and identification of whether the errors are detrimental to the business or the consumer.
- Demonstrate confidence and decision-making process about regulatory options in relation to equipment that is causing consumer detriment.
- Remember first principles: relevant legislation, obligations, powers, offences, defences, consequences. In particular what regulatory options you have at your disposal [notices, disqualification, seizure etc].
- Ability to review documentation to assess whether it relates to that particular equipment. [Credit to the candidate who pointed out that there was a stray non-NAWI certificate before questioning started]
- Bridge the gap between the theoretical knowledge of equipment and legislation and applying this in a practical scenario.
- Improve recognition and confidence in relation to medical weighing equipment.

Station 4: AWI and Packaged goods

- Candidates were generally able to recognise a variety of equipment and the Regulations which apply to them. Most were able to mention OIML documents at least with many being able to reference the specific document identification.
- The practical issues around testing were more variable reflecting the amount of actual experience different candidates had. When asked to decide some candidates, whilst able to explain some of the issues, struggled to reach a decision or were not sure when challenged. This was more evident when candidates weren't clear and confident in their powers and how to use them. The best candidates were able to make a clear, reasoned decision and justify themselves.

- Greater exposure, even just observing tests or seeing equipment in situ would help candidates give more rounded answers. When asked about checking equipment during factory inspection some candidates reverted to verification style testing rather than more practical solutions.
- The 3 Packers Rules were well known to all and often quoted word for word, with references to schedules of the Regulations on where to find additional information.
- When considering packaged goods, primarily food, the metrology/labelling requirements were good for some key elements (drained weight for example) but variable in others (prescribed quantities for wine). Often references to the labelling requirements within the Food Information Regulation were missed or more limited so awareness of these could help candidates score higher.

A total of 29 candidates did the Oral exam in June 2024.

The pass mark for the Oral remains set at 40%. The results for the June 2024 Oral examinations are as follows;

W+M Oral: All candidates passed their Oral exams this time.