# **EPA Apprentice Guidance**

**End-point Assessment Apprentice Guidance for:** 

# **Level 5 Senior Metrology Technician**

Standard Reference: ST0283

#### **Document Amendments**

Amendment Made	Issue Number	Effective From
New document	1.0	01-2021

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#### **About EAL**

Since 1964, EAL (Excellence, Achievement and Learning) has been awarding superior vocational qualifications and apprenticeship components for engineering, building services and related sectors.

EAL has been at the heart of new apprenticeship standards development, supporting employer trailblazer development groups for key industry occupations since 2013, when the reforms began. With our long-standing tradition of being closer to industry and designing qualifications that reflect this close partnership, EAL is perfectly positioned to guide the employer development groups' work. Our expertise, knowledge and support ensures the new standards meet the needs of all employers, from SMEs to multinationals, and provide learners with the best possible start to their careers.

EAL is an end-point assessment organisation (EPAO) and is listed on the Register of End-Point Assessment Organisations (RoEPAO).

# **Equal Opportunities and Diversity**

EAL expects all employers to enable apprentices to have equal access to training and assessment for endpoint assessment (EPA) in line with the Equality Act 2010 and protected characteristics. Further details can be found in the EAL Equal Opportunities and Diversity Policy:

http://www.eal.org.uk/centre-support/centre-support/policies-and-important-documents

#### **Customer Service and Feedback**

Customer Experience is a fundamental part of EAL's commitment to you. EAL aims to ensure that all customers receive a high quality efficient service. We are always interested in feedback and if you have any comments or feedback on our qualifications, products or services, please contact the Customer Experience Team:

EAL Customer Experience Tel: +44 (0)1923 652 400

Email: <a href="mailto:customer.experience@eal.org.uk">customer.experience@eal.org.uk</a>

### **Document Purpose**

To ensure a consistent approach when carrying out the Business Project, Professional Review with Presentation, across all independent assessment panel members, assessment sites, apprentices and assessment decisions. This document supports the template document which was developed to record the outcome of the Business Project, Professional Review with Presentation and will be an auditable record of the End Point Assessment (EPA) activity.

This document and its contents will be used to **guide** independent assessors, panel members and internal quality assurers on the outcome of the assessment decisions. Please read the guidance notes; ensure the correct information is recorded and keep the document securely stored.

It supports the Apprentice Recording Document, which has been developed to record the outcome of the, Business Project, Professional Review with presentation and the overall grade. The Apprentice Recording Document is an auditable record of the End Point Assessment (EPA) activity.

This document should be used in conjunction with EAL's End-point Assessment Policies and Procedures Handbook.

Failure to provide correct and accurate information may delay the timely completion of the apprenticeship.

#### **Overview**

The EPA is designed to enable you to demonstrate that you are fully conversant in the knowledge, skills and behaviours (KSBs) expected of individuals working at this level. It is designed to provide assessors with a holistic view of you, and to allow them to assess to what extent you meet, or exceed, the level 5 Senior Metrology Technician apprenticeship standard. The EPA must be completed within 12 weeks after you have met the EPA gateway requirements.

The Apprenticeship Standard and End-point Assessment Plan defines when, what, who and how the EPA is assessed. All those participating and delivering this EPA, which includes you, assessors and employers, **must** refer to the following principle documents for the full details of the EPA requirements:

#### **Level 5 Senior Metrology Technician**

- Apprenticeship Standard ST0283 (approved for delivery 07th August 2018).
- End-point Assessment Plan.

Both of which are currently available here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/senior-metrology-technician-v1-0

Whilst elements of the Apprenticeship Standard and End-point Assessment Plan have been reproduced within this document under the following licence: <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/">http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/</a>, it is the responsibility of the assessors to ensure that you are being assessed against the correct version of the Apprenticeship Standard and End-point Assessment Plan.

## **End-point Assessment Gateway**

Employers must satisfy themselves that apprentices are ready for their end-point assessment, which is evidenced by the apprentice consistently working at, or above, the level set out in the occupational standard.

In addition to the employer's confirmation that the apprentice is working at, or above, the level in the occupational standard, the following gateway requirements must be met prior to the apprentice starting the EPA:

- \*Apprentice achieves English and mathematics at level 2
- Being competent across the knowledge, skills and behaviours required by the Senior Metrology Technician standard

Independent assessment panel members must ensure that the **Gateway Checklist** document (**Appendix 1**) has been completed to confirm the above requirements have been met.

At this point the apprentice may wish to submit evidence of their Business Project to support the KSB's, to the EPAO. This can be used to support the professional discussion points within Assessment Method 2: Professional Review with presentation. The evidence they wish to submit must be referenced against the relevant KSB's within the standard.

This can be recorded using the Business Project, professional review and presentation mapping document provided, contained within **Appendix 2 and 3.** 

#### **Assessment Methods**

The end-point assessment is made up of two elements:

- 1. Business Project
- 2. Professional Review with Presentation

# **Assessment Method 1: Business Project**

You will undertake a work-based project within a three-month time period post gateway, that will synoptically assess your knowledge, skills and behaviours, as detailed in annex 2. All project topics will be agreed in advance with you the Assessment Organisation, the employer. You and the employer will be required to provide a signed statement to confirm the project is your own work.

The project will involve you identifying and addressing an improvement issue or opportunity, which could relate to products, processes, quality assurance or the business, that once addressed will bring benefit back to the organisation and/or industry. The selected project must be comprehensive, providing scope for you to show the full range of their knowledge, skills and behaviours as outlined in annex 2. It must demonstrate you have applied what you have learnt, have understood and able to connect your learning to the organisation's objectives.

The project must consist of a written report. The written report should typically be between **4000** and **5000** words, but flexibility is given on the word count. The written report can contain data, diagrams, pictures, tables, appendices etc, and these do not form part of the word count. The written report and appendices should be submitted to the Assessment Organisation as one PDF document.

The project can focus on an immediate or strategic long-term issue or opportunity and will contain the following (as a minimum):

- 1. Executive summary
- 2. Introduction and background
- 3. Outline of the issue or opportunity
- 4. Justification for the change
- 5. Evidence of effective research
- 6. Analysis of benefits and drawbacks including commercial, contractual and organisational etc.
- 7. Analysis of risks
- 8. Summary of the recommendations
- 9. Consideration of legislation, regulation, industry and organisational policies, procedures and requirements
- 10. Proposed plan for implementation and stakeholder engagement

The project is expected to draw together the learning from across the standard, including the ability to select and apply knowledge as well as identifying and interpreting complex sets of data, and presenting the proposed solution.

#### Grading

The project will be graded using criteria developed by the Assessment Organisation which will be aligned to the grading profile below:

- 1. A pass candidate will provide a well thought out, logical and coherent report, stating how improvements would lead to measurable benefits to the business. They will be able to demonstrate how evidence gathered during research, is investigated and findings evaluated and explained. The project will demonstrate a good understanding of business and how it interacts with the wider industry.
- A distinction candidate will in addition, demonstrate an excellent knowledge of relevant methods, concepts and issues and a perceptive understanding of the wider context of the work they are doing. They will be able to critically examine information and present strengths, weaknesses and limitations with justified conclusions.

To achieve a **pass** grade, you **must** achieve all **17** Knowledge, skills and Behaviours. To achieve a **distinction** grade at least **14** of the Knowledge, skills and Behaviours must be marked as a distinction

#### **Assessment Method 2: Professional Review with Presentation**

#### What will happen?

Your Business Project will have been assessed already so the next stage is your professional review and presentation. Overall, these should last at least 1 hour. You will deliver your presentation first and should then be offered the opportunity of a short break before starting your professional discussion. If you are not offered a break, please ask for one if you feel you need it. If you want to continue straight on, just let your IA know

#### **Your Presentation**

The professional review with presentation is a structured meeting between you and independent assessor it is undertaken at least 2 weeks after the business project has been completed.

The professional review with presentation which can run for up to 2 hours. 30 minutes business project presentation followed by a structured discussion between you and the independent assessor lasting a minimum of 1 hour but up to a maximum of 1.5 hours. (15 min presentation, 15 min for question and answers).

The professional review will include questioning on the business project, exploring the apprentice's broader understanding of the principles and concepts behind their findings and recommendations.

Explores the period of on-programme learning and development and assesses technical knowledge as well as evidence of your skills and behaviours.

The Professional Review with Presentation checklist is set out to provide a consistent approach during the interview for the independent assessor to follow. It contains a series of Lead Questions which can be used if the review of the does not identify any shortfalls in your evidence. The assessor does not have to use them and can replace them with alternatives of their own. The following are all acceptable:

- A lead question stimulates a discussion between the Independent Assessor and you
- Supplementary questions may be asked, aimed at probing weak areas of response
- An opportunity to ask questions raised from the review of the business project and presentation where leading questions have failed to elicit the depth and breadth of the knowledge and skills required within the standard

In any event at least 1 question must be asked in every learning area.

If a referral is recorded in the outcome it is important to clearly record and reference the reasons why so that the employer, apprentice and training provider can address the areas of weakness referenced to the standards; they will plan additional training before booking re-assessment. Only those areas indicated as deficient against the standards will be required to be assessed again.

The date and time of the professional review with presentation should be planned in advance to ensure that you have sufficient time to prepare. You should be given at least **one** weeks notice of the professional review with presentation date. You can, if you wish, bring supporting material/evidence to the professional review to assist with their presentation and in the demonstration of their knowledge, skills and behaviours. The knowledge, skills and behaviours in the standard as defined in annex 3.

The independent assessor will follow the requirements of the Assessment Organisation and record their evidence in a formal report. This report must be made available to you in a timely fashion. Assessment tools must be developed by the Assessment Organisation to support reliable and consistent delivery of professional review with presentation assessments, such as, professional review questions, a professional review structure brief and recording documentation and guidance document/s on how to conduct a robust professional review. The professional review with presentation will cover the requirements detailed in annex 3.

#### Venue

The professional review with presentation will be conducted in a 'controlled environment' i.e. a quiet room with access to all the equipment that you require to deliver a presentation. Where the discussion is not face-to-face, independent assessors must ensure adequate controls are in place to maintain fair and accurate assessments, and have robust procedures in place to authenticate the learners' identity.

The format and layout of the presentation is a matter of personal choice, however, it is expected that it will contain visual elements as well as verbal. If specific equipment is required for the presentation, you should supply it yourself.

#### What is an EPA Professional Discussion?

The EPA Professional Discussion is an interactive formal discussion focused on the skills, knowledge and behaviours you need for your job role. It will enable the IA to ask questions of you in relation to your skills, knowledge and behaviours, based on your Business Project and presentation evidence. Questions will be standardised, so that essential knowledge can be demonstrated consistently by all apprentices.

It is a structured discussion between you and the IA drawing upon evidence of how you have performed during the Apprenticeship. It covers both the tasks you have completed in your day-to-day work, the standard of your work and the behaviours you have demonstrated throughout, such as being a team player, having a positive attitude and a strong work ethic; being a responsible and self-motivated employee with a proven commitment to your organisation. This enables the EPA Professional Discussion to cover a broad range of, skills, knowledge and behaviours set out in the apprenticeship standard.

It will also be an opportunity for the IA members to:

- Clarify any points and/or question you on the evidence you have presented in the Business project and Professional review and presentation
- Confirm and validate that the Business project of evidence is your own work
- Confirm and validate the judgements about the quality of the work you have completed
- Explore particular areas of work presented in the Business project, how it was carried out, any problems that you encountered and how these were resolved
- Validate your skills, knowledge and behaviours of the organisation in terms of their products, processes, procedures and information systems.

The EPA Professional Discussion will also find out the depth and breadth of your understanding of the learning areas requirements.

#### Who are the Assessors / Panel Members?

The independent assessor/panel members will be nominated by your employer; they may come from within their own organisation or brought in if required from other employers or from the training provider but one member will come from the EPA organisation. They will not have directly worked with you or participated in your learning and training. The assessors/panel members will have:

- · Excellent knowledge and understanding of the apprenticeship standard
- The ability to contextualise the relevant work-based project(s)
- Current, relevant occupational knowledge and expertise, at the relevant level of the occupational area(s)
  they are assessing, which has been gained through "hands on" experience in the profession within the
  last 5 years.

They will be 'approved' by EAL for the purposes of conducting the end-point assessment.

#### What preparation is needed for the EPA Professional Discussion?

Every EPA Professional Discussion is different, so it is not possible to know in advance exactly what the panel members will ask you. However, there are some common styles and approaches for this type of Professional Discussion that will help the panel members to assess your submitted Business project. The examples you have submitted will be how you have performed your work activities and the EPA Professional Discussion will be your opportunity to show case all your skills, knowledge and behaviours. This will be the main focus during the assessment, however, you should also plan for wider questioning about your apprenticeship and what you have learned, how you have used the skills, knowledge and behaviours gained and applied this learning in your work.

It is not a memory test and you can prepare notes making reference to your Business project so you may want to do this as your planned approach and have your notes with you during the Professional Discussion. The EPA Professional Discussion will typically last a minimum of one hour.

Having spent so much time developing your Business project and presentation to showcase your skills, knowledge and behaviours to your employer, it may seem strange to hear that a key part of your preparations is to get to re-cap on what you have submitted in your Business project. The panel members will expect you to have a good understanding of the contents of your work and that means knowing your business project so you can discuss the content with minimum notes, after all you performed the tasks.

Here are some ideas to help you prepare for your EPA Professional Discussion.

- Make notes to remind you of key points you need to remember and flag pages in your Business project
  and presentation where you may need to refer for detailed information. Practice using this method to
  ensure any reference you give is correct.
- Who are you? Think bigger picture. What do you know about your organisation? What do you do in your organisation? Who do you report to and interact with? Where do you sit within your organisation? How important is your work to you and your organisation? What would happen if you didn't do your job?
- Develop an introduction of yourself, what you do and the apprenticeship journey you have taken to get to where you are.
- Read through each example and think about the key features of how you do your job and the behaviours you have demonstrated. It is likely the questions from panel members will probe stages of your approach to your work, the behaviours you have adopted to ensure it follows a logical sequence in a safe, effective and efficient manner in line with the expected organisational procedures. If you think you missed details or made a mistake during your own review of your portfolio, don't panic. Make a note, build it in to your showcase and prepare an answer that you can use if it is questioned during the EPA Professional Discussion.
- Work with your mentor to build your evidence against the apprenticeship standard and what is required
  for the standard and how your evidence meets those requirements. Your EPA Professional Discussion will
  find out your depth and breadth of understanding of the competence requirements.
- Be clear when discussing your work in the context of what you did. Think about including 'I' instead of 'We'.
- For example; 'I was responsible for.....' and when discussing working in a team be clear in defining what your contribution was and the work elements you completed.
- Practice showcasing examples of your work to yourself and then with others who are not involved in the EPA Professional Discussion to gain confidence. Ask them to challenge you with questions.

• Make a list of what you need for your EPA Professional Discussion and check it off before you arrive to ensure you have all you need for a successful Professional Discussion.

**Remember** ............ Your Business project of evidence must be submitted to your panel of assessors at **least 1** month before your Professional Discussion.

#### What happens during the EPA Professional Discussion?

- Be prepared.
- Be well presented, you should at least be well groomed and neatly dressed.
- Stay calm and pleasant.

Your panel members will cover some preliminary generic items such as; introductions, the approach and timings of the EPA Professional Discussion as well as your right to appeal, in the event that you feel the final decision is not appropriate.

A series of questions will be put to you to answer and notes will be recorded by the panel members, For example:

- Talk us through.......
- Explain in detail......
- Describe......
- Give an example......
- Demonstrate.....
- Where do you find......
- How did you.....
- What was the objective.....
- Why did you.....

Listen carefully to the questions. Don't answer simply 'yes' or 'no' to questions; on the other hand do not give a prepared speech. Try to answer the question as it is put to you. If you don't understand the question, ask the panel members to repeat it or repeat your interpretation to the panel members, if you still don't understand the question, then it is better to admit it than to try and bluff.

Don't be overly worried that some parts of the EPA Professional Discussion were really difficult; it is only by pushing you to your limits that the panel members can determine your ability.

At the end of the assessment you will be informed the EPA Professional Discussion is over. Collect you papers and any items you prepared and breathe – well done you have just completed your EPA Professional Discussion.

#### Grading

The professional review with presentation will be graded using criteria developed by the Assessment Organisation which will be aligned to the grading profile below:

 A pass candidate will deliver a presentation, which is well structured and completed within the timescales allowed. They will respond to questions in a clear and well-defined manner providing examples of further research and be able to link answers to own knowledge, skills and behaviours. They are able to reflect on their own learning and are able to make suggestions for future goals and objectives. They are able to expand on information and scenarios provided, stating implications and the importance of methodologies and requirements. 2. A distinction candidate will in addition, present in a confident and highly engaging way, with thought given to content, layout and structure. They are able to demonstrate an understanding of the bigger picture and are able to enter into scenario discussion, identifying issues and proposing alternative solutions and improvements. They can communicate complex technical information confidently and succinctly. They will be able critically assess own performance, demonstrating an understanding of their own learning style.

During the review you will demonstrate a proactive approach to display your knowledge, skills and behaviours and provide measurable examples of your teams improvements.

To achieve a **pass** grade, you **must** achieve all **10** Knowledge, skills and Behaviours. To achieve a **distinction** grade at least **8** of the Knowledge, skills and Behaviours must be marked as a distinction

## **Grading**

Independent assessors must individually grade each assessment method according to the requirements set out in the end-point assessment plan for this standard. Restrictions on grading apply where apprentices re-sit/re-take an assessment method – see re-sit/re-take section below.

The two assessment methods outlined are **equally** weighted. EAL as the EPAO will combine the grades of all two assessment methods to determine the overall EPA grade.

To achieve an EPA pass, you must achieve at least a pass in all two assessment methods.

To achieve an EPA distinction, you must achieve a distinction in all two assessment methods.

A fail in any assessment method will result in an EPA fail.

Independent assessors' decisions must be subject to **moderation** by EAL (as the EPAO). Decisions **must not** be confirmed until after moderation.

The full details of the grading requirements, including: the area of the standard to be tested, the grade descriptors and the grading combinations table can be found in the end-point assessment plan for this standard here: https://www.instituteforapprenticeships.org/apprenticeship-standards/senior-metrology-technician-v1-0

See (Appendix 4) for overall grading.

#### Re-sits and Re-takes

If you fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

You should have a supportive action plan to prepare for the re-sit or a re-take. Your employer will need to agree that a re-sit or re-take is an appropriate course of action.

An apprentice who fails any of the assessment methods, and therefore the EPA, in the first instance, will be required to re-sit/re-take those failed assessment methods only. However, the re-sits/re-takes must be successfully completed within **six-months** of the fail notification, otherwise the entire EPA must be re-sat/re-taken.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

Re-sits/re-takes should be scheduled as soon as possible.

Where any assessment method has to be re-sat or re-taken, You will be awarded a **maximum** EPA grade of **pass**, unless EAL (as the EPAO) determines there are exceptional circumstances requiring a re-sit or re-take.

If a re-take/re-sit relates to the practical demonstration, you must be presented with a different specification and set of questions.

If the re-take/re-sit relates to the interview/professional discussion, you must be questioned on the same subject area using a different set of questions.

## **Roles and Responsibilities**

There are five main roles involved in the end-point assessment process: the **apprentice**, the **employer**, the **employer technical expert**, EAL as the **EPAO** and the **independent assessor**. A table listing their main responsibilities can be found in the end-point assessment plan for this standard here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/senior-metrology-technician-v1-0

## **Internal Quality Assurance (IQA)**

Internal quality assurance refers to the requirements that EAL as the EPA organisation must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions.

#### EAL for this EPA will:

- Appoint independent assessors who have comprehensive experience of the senior metrology technician role, at the same level or above that of the apprenticeship standard, typically with at least three years' experience
- Appoint independent assessors who have recent relevant experience of the occupation/sector at least
  at the same level as the apprentice; typically worked in the sector in the last three years or can
  demonstrate current knowledge and skills developed through continued professional development
- Appoint independent assessors who hold or are working towards an independent assessor qualification, for example TAQA (Training and Quality Assessment)
- Provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading.
- Have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across organisation and over time.
- Operate induction training and standardisation events for independent assessors when they begin working for EAL.
- Operate induction training and standardisation events for each independent assessor before they deliver an updated assessment method for the first time.
- Thereafter operate regular standardisation events for independent assessors at a frequency determined by risk, good practice and need and based on sufficient robust auditing activity.
- Operate moderation of assessment activity and decisions, through examination of documentation and
  observation of activity, good practice, need and based on sufficient robust auditing activity. EAL will have
  in place clear robust relevant policies and manage the moderation of their independent assessors
  dynamically (i.e. increase moderation rates above a minimum as necessary as a matter of course).

# **External Quality Assurance (EQA)**

EQA arrangements will ensure that EAL, as the EPAOs delivering EPA for this apprenticeship, operates consistently and in line with the end-point assessment plan for this standard.

EQA for this apprenticeship standard will be undertaken by the Institute for Apprenticeships (IfA).

# Mapping of Knowledge, Skills and Behaviours

A table, which provides full mapping of the KSBs, can be found in Annex A of the end-point assessment plan for this standard here: <a href="https://www.instituteforapprenticeships.org/apprenticeship-standards/senior-metrology-technician-v1-0">https://www.instituteforapprenticeships.org/apprenticeship-standards/senior-metrology-technician-v1-0</a>

# **Appendix 1: Gateway Checklist**

The EPA must only start once the employer is satisfied that you are consistently working at or above the level set out in the occupational standard; that means you have achieved occupational competence. In making this decision, the employer may take advice from your training provider(s) but the decision must ultimately be made solely by the employer.

In addition to the employer's confirmation that you are working at or above the level in the occupational standard, the following gateway requirements must be met prior to you starting the EPA:

The apprentice has:	Evidence reference	Employer/provider confirmation (√)	EPAO confirmation (√)
*Achieved a minimum level 2 <sup>1</sup> English	Example Template	Example Template	Example Template
*Achieved a minimum level 2 Maths	Example Template	Example Template	Example Template
Proven competent across the knowledge, skills and behaviours required by the Senior Metrology Technician standard	Example Template	Example Template	Example Template

<sup>.</sup> ¹ For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.

# **Appendix 2: Assessment Method 1: Business Project**

Level 5 Senior Metrology Technician Apprenticeship – Standard Reference Number: ST0283
Assessment Method 1: Business Project
Apprentice's Name: Click or tap here to enter text.
Apprentice's Company: Click or tap here to enter text.
Apprentice's Unique Identifier: Click or tap here to enter text.
Date Apprenticeship started: Click or tap here to enter text.
Date of End Point Assessment: Click or tap here to enter text.
Note: The Business Project mapping document will be submitted to EAL as supporting evidence to support Method 1: Business Project Review as part of their EPA Gateway application.

# **Appendix 2: Assessment Method 1: Business Project**

Fai	il	Pass Criteria		Distinction Criteria	a
F		Р		D	
Do no meet the criter	t	Candidate will provide a well thought out, logical and coherent report, stating how improvements would lead to measurable benefits to the business. They will be able to demonstrate how evidence gathered during research, is investigated and findings evaluated and explained. The project will demonstrate a good understanding of business and how it interacts with the wider industry.		Candidate will in addition, demonstrate an excellent knowledge of relevant methods, concepts and issues and a perceptive understanding of the wider context of the work they are doing. They will be able to critically examine information and present strengths, weaknesses and imitation with justified conclusions	
Ref		Descriptors		justification of why they think they met Pass and Distinction criteria	Evidence Reference Number:
K1	stra tec var trac	w to apply a measurement ategy, processes and hniques, including, iation, uncertainty and ceability within the anisation.	Click or tap h	ere to enter text.	Click or tap here to enter text.
K2	incl tec dev will	w metrology is evolving, luding new and specialist hnological and scientific relopments and how these impact on the future ustry.	Click or tap h	ere to enter text.	Click or tap here to enter text.
К3	prir ma syst imp syst tec rela	rject management inciples and systems; quality nagement and assurance items; business provement and innovation items; processes and inniques and the how these interested to the business irronment in which the anisation operates.	Click or tap h	ere to enter text.	Click or tap here to enter text.
K4	obl bud per	mmercial and contractual igations including forecasts, dgets, cost and formance monitoring hniques.	Click or tap h	ere to enter text.	Click or tap here to enter text.

K5	The appropriate mathematical, scientific and systems analysis techniques and analytical methods to support measurement processes and systems and software.  Additional information:  This includes statistics, process control methodologies, measurement systems analysis, data analysis, evaluation of measurement uncertainty and scientific techniques relating to the specific area/s of metrology encountered in the workplace.	Click or tap here to enter text.	Click or tap here to enter text.
K6	How to apply health, safety and environmental legislation, regulation, industry and organisational policies, procedures and requirements within the organisation.  Additional information:  Legislation includes:  How to apply health, safety and environmental legislation, regulation, industry and organisational policies, procedures and requirements within the organisation.  Additional information:  Legislation includes:  • The Health and Safety at Work Act 1974  Health and safety for metrology includes:  • Personal Protective Equipment  • Manual Handling	Click or tap here to enter text.	Click or tap here to enter text.

	<ul> <li>Hazards, such as, working with electricity/high voltage current, working with lasers, working with high temperature instrumentation</li> <li>Control of Substances Hazardous to Health (COSHH).</li> </ul>		
K7	How to apply national and international regulations and standards, industry and organisational procedures and requirements relating to codes of conduct within the organisation.	Click or tap here to enter text.	Click or tap here to enter text.
	Additional information:  National and International regulations and standards includes International Organization for Standardization (ISO) standards, such as, ISO 9001 Quality Management Systems and ISO 17025 General requirements for the competence of Testing and Calibration Laboratories.		
S1	Develop and monitor measurement capability and capacity within own area of responsibility to support strategic planning.	Click or tap here to enter text.	Click or tap here to enter text.
S2	Investigate and suggest changes to process control activities to ensure compliance with contractual, organisational and industry procedures and requirements.	Click or tap here to enter text.	Click or tap here to enter text.
S3	Participate in risk assessments, assess outcomes and make suitable recommendations for change to processes and procedures, as appropriate	Click or tap here to enter text.	Click or tap here to enter text.
S4	Plan and manage resources to meet the needs and objectives	Click or tap here to enter text.	Click or tap here to enter text.

	of the organisation and its customers.		
S5	Plan, manage, monitor and evaluate measurement activities in a way that contributes to sustainable development, continuous improvement and supports good practice.	Click or tap here to enter text.	Click or tap here to enter text.
S6	Diagnose and solve complex problems in relation to measurement activities and take corrective and preventative action as appropriate.	Click or tap here to enter text.	Click or tap here to enter text.
S7	Participate in and provide advice on internal and external audits ensuring verification, validation, quality assurance, quality control, compliance and identify process improvement opportunities, where applicable.	Click or tap here to enter text.	Click or tap here to enter text.
S10	Verify, analyse, evaluate, validate and store measurement information, results and data in line with organisational procedures, specifications to support measurement and continuous improvement activities.	Click or tap here to enter text.	Click or tap here to enter text.
S11	Ensure compliance with relevant health, safety and environmental legislation, regulation, industry and organisational policies and procedures and requirements relating to safe working practices.  Additional information:  Legislation includes:  • The Health and Safety at Work Act 1974	Click or tap here to enter text.	Click or tap here to enter text.

	Health and safety for metrology includes:  • Personal Protective Equipment  • Manual Handling  • Hazards, such as, working with electricity/high voltage current, working with lasers,		
	working with high temperature instrumentation		
	•Control of Substances Hazardous to Health (COSHH).		
S12	Ensure compliance with statutory regulations, national and international standards, industry and organisational procedures and requirements relating to codes of conduct when managing measurement activities.	Click or tap here to enter text.	Click or tap here to enter text.
	Additional information:  National and International regulations and standards includes International Organization for Standardization (ISO) standards, such as, ISO 9001 Quality Management Systems and ISO 17025 General requirements for the competence of Testing and Calibration Laboratories.		

# **Appendix 3: Assessment Method 2: Professional Review with Presentation**

Level 5 Senior Metrology Technician Apprenticeship -**Standard Reference Number: ST0283** Assessment Method 2: Professional Review with Presentation Apprentice's Name: Click or tap here to enter text. Apprentice's Company: Click or tap here to enter text. Apprentice's Unique Identifier: Click or tap here to enter text. Date Apprenticeship started: Click or tap here to enter text. Date of End Point Assessment: Click or tap here to enter text. \*Note: The Business Project mapping document will be submitted to EAL as supporting evidence to support Method 2: Professional Review with Presentation Review as part of their EPA Gateway application.



# **Appendix 3: Assessment Method 2: Professional Review with Presentation**

Fai	il	Pass Criteria		Distinction Criteri	a
F		Р	P D		
Do no meet the criter	:	candidate will deliver a pressibility which is well structured and within the timescales allowerespond to questions in a cledefined manner providing efurther research and be ableanswers to own knowledge, behaviours. They are able to their own learning and are a suggestions for future goals objectives. They are able to information and scenarios postating implications and the of methodologies and requires	d completed ed. They will ear and well-examples of e to link, skills and o reflect on able to make and expand on provided, importance	structure. They are able to demonstrate an understanding of the bigger picture and are able to enter into scenario discussion, identifying issues and proposing alternative solutions and improvements. They can communicate completechnical information confidently and succinctly. They will be able critically assess own performance, demonstrating an understanding of their own learning style. During the review they will demonstrate a proactive approach to display their knowledge, skills and behaviours and provide measurable examples of their or their teams improvements.	
Ref		Descriptors	7 7	justification of why they think they met Pass and Distinction criteria	Evidence Reference Number:
S8 Develop communication channels and build effective relationships, by engaging colleagues, customers and stakeholders and presenting information in a clear and concise way, to meet organisational requirements.		Click or tap h	ere to enter text.	Click or tap here to enter text.	
S9	Produce and confirm records, reports and other measurement documentation, as required.		Click or tap h	ere to enter text.	Click or tap here to enter text.
B1	pro em imp	ositive, innovative and eactive, suggesting and bracing change in order to brove quality and formance.	Click or tap h	ere to enter text.	Click or tap here to enter text.
B2	Demonstrates <b>drive and</b> resilience, has a strong focus on quality, delivery, completion and customer satisfaction, constantly seeking to maximise and improve own and others performance.		ere to enter text.	Click or tap here to enter text.	



В3	Is inquisitive and conscientious, seeking feedback from customers and stakeholders, considering its impact on own area of responsibility, the organisation and the industry.	Click or tap here to enter text.	Click or tap here to enter text.
B4	Acts as a role model and coach, manages resources consistently, promoting organisational effectiveness and efficiency.	Click or tap here to enter text.	Click or tap here to enter text.
B5	Makes decisions using personal initiative, analysis and technical knowledge and can make sense of complex situations, with a high level of attention to detail.	Click or tap here to enter text.	Click or tap here to enter text.
B6	Is reliable and takes responsibility for any direct reports, and own actions and decisions	Click or tap here to enter text.	Click or tap here to enter text.
В7	Is confident and has the ability to represent, and champion own, organisational and industry views, needs and objectives. Can challenge the status quo, as required.	Click or tap here to enter text.	Click or tap here to enter text.
B8	Is <b>Committed</b> to continuous professional development, keeps up to date with advances in measurement science and expands own Metrology skills and knowledge through a variety of methods.	Click or tap here to enter text.	Click or tap here to enter text.



# **Appendix 4: Overall Grading**

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

#### Example:

Assessment method 1 - Business Project	Assessment method 2 – Professional Review with Presentation	Overall Grading
Fail	Any grade	Fail
Any grade	Fail	Fail
Pass	Pass	Pass
Pass	Distinction	Pass
Distinction	Pass	Pass
Distinction	Distinction	Distinction

Please Indicate Apprentice Grade recorded against Assessment methods: Fail, Pass and Distinction

Assessment method 1 - Business Project	Assessment method 2 – Professional Review with Presentation	Overall grading
Example Template	Example Template	Example Template

The above is a sample only; please refer to EPA Apprentice Recording Document for the relevant blank Document.



# What happens after the assessment day?

The decisions made by the Independent Assessor will be subject to moderation before any final outcomes are confirmed.

Confirmation of the outcomes will be sent to your employer and once agreed, the End Point Assessment Organisation will submit your results and request your apprenticeship certificate.

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