ENERGY & UTILITY SKILLS

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EUIAS Level 4 End-point Assessment for
Lead Engineering Maintenance Technician

Supporting Documents

QAN 610/3506/3

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Supporting Documents for

EUIAS Level 4 End-point Assessment for Lead Engineering Maintenance Technician

QAN 610/3506/3

Updates to the supporting documents

Since the first publication of the EUIAS Lead Engineering Maintenance Technician (LEMT) Supporting Documents the following updates have been made.

Version	Date first published	Section updated	Page(s)
v1.0	March 2024	First published	All

Appendix A: Glossary

Amplification – provides more detail on how individual knowledge, skills or behaviours statements should be interpreted. Where the KSB statements, themselves are deemed self-explanatory, no amplification is provided. Assessment may include questions on anything identified in the amplification

Behaviours (as part of KSBs) – specific mindsets, attitudes or approaches identified as part of the apprenticeship standard that must be evidenced during end-point assessment

Elements – are the knowledge, skills and behaviours and what is needed to competently undertake the duties required for an occupational standard

Gateway - the stage of the apprenticeship where the apprentice, employer and training provider determine whether the apprentice is ready to undertake end-point assessment

Guidance – is only provided where it is required to support interpretation of the KSB statements

Knowledge (as part of KSBs) – specific information, technical detail, and 'know-how' identified as part of the apprenticeship standard that must be evidenced during end-point assessment

Project – The project report will involve the apprentice completing a significant and defined piece of work that has a real business application and benefit. The project report will start once the apprentice has gone through gateway

Presentation - A presentation involves an apprentice presenting to an independent assessor on a particular topic. It will be followed by a questioning session from the independent assessor

Skills (as part of KSBs) – the practical application of knowledge identified as part of the apprenticeship standard that must be evidenced during end-point assessment

Standard – An occupational standard is a description of an occupation. It contains occupational profile, and describes KSBs needed for someone to be competent in the occupation's duties. Occupational standards are developed by employers for occupations that meet the Institute for Apprenticeships and Technical Education current occupation criteria

Topic - is a collection of elements grouped into a theme e.g. Health and Safety

Appendix B: Gateway Eligibility Form

(Standard Version: ST0999 version 1.0; Assessment Plan Version: ST0999 v1.0)

Apprentice's name:	Apprentice's job title:
Name of Employer:	Name of Training provider:
Employer representatives present:	Training provider representatives present:
Apprenticeship start date:	Apprenticeship on-programme end date:
Gateway meeting date:	
Has the apprentice taken any part of the end-point assessment for this apprenticeship standard with any other End Point Assessment Organisation?	Y / N
If "Yes" please give details:	

Apprentice's details

Eligibility requirements:

The apprentice must confirm their achievement of the following:

Eligibility requirement	Achieved by the apprentice? Y/N	Evidence (Scans of certificates MUST be included)
Achieved Level 2 English or higher		
Achieved Level 2 Maths or higher		
For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirements is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those who primary language is BSL.		
BTEC Higher National Certificate in Engineering (General Engineering) or BTEC Higher National Certificate in Engineering (Operations Engineering)		
Compiled and submitted a 500 word project brief and agreed the project title and scope with EUIAS for the project: report and presentation with questions		
Compiled and submitted a portfolio of evidence that meets the specification requirements, on which the professional discussion will be based		

Gateway Eligibility Declaration

The apprentice, the employer and the training provider must sign this form to confirm that they understand and agree to the following:

1. The apprentice has completed the required on-programme elements of the apprenticeship and is ready for end-point assessment with EUIAS.
2. EUIAS has been informed about any reasonable adjustment and/or special considerations requests.
3. The apprentice will only submit their own work as part of end-point assessment.
4. All parties agree that end-point assessment evidence may be recorded and stored by EUIAS for quality assurance purposes.
5. The apprentice has been on-programme for a minimum duration of 365 days.
6. The apprentice has achieved English and maths Level 2 or higher as detailed in this document.
7. The apprentice with an education, health and care plan or a legacy statement, has achieved the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.
8. The apprentice has achieved BTEC Higher National Certificate in Engineering (General Engineering) or BTEC Higher National Certificate in Engineering (Operations Engineering)
9. The apprentice has compiled and submitted a 500-word project brief and agreed the project title and scope with EUIAS for the project: report and presentation with questions
10. The apprentice has compiled and submitted a competent portfolio of evidence, on which the professional discussion will be based.
11. The apprentice, if successful, gives permission for EUIAS to request the apprenticeship. certificate from the ESFA who issue the certificate on behalf of the Secretary of State.
12. The apprentice has been directed to the EUIAS Appeals Policy and Complaints Policy.
13. The employer/training provider has given the EUIAS at least three months' notice of requesting this EPA for this apprentice.

14. If the Gateway Eligibility Report is not completed in full, meeting all requirements, and submitted to EUIAS, the end-point assessment cannot take place.

Signed on behalf of the employer (print name):	Signature:	Date:
Signed on behalf of the training provider (print name):	Signature:	Date:
Apprentice's name (print):	Signature:	Date:
EUIAS use only:		
EUIAS Sign off:		
Comments/actions:		

Appendix C – LEMT 500 Word Project Brief, Project Title, Scope, Declaration and Sign-off Form

Instructions

This form has three purposes:

1. To help you plan the project report with your apprentices
2. To inform EUIAS of the 500 word project brief, project title, scope for the live assessment
3. For all parties (Apprentice; Project Manager and EUIAS) to provide declarations and sign-offs

The project report should be designed to assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship. However, as a minimum the project report must cover the activities and KSBs listed in the LEMT 500 Word Project Brief, Project Title, Scope, Declaration and Sign-off Form below.

EUIAS will review the Apprentice's Project brief; title and scope and confirm it is suitable to proceed.

Complete the 'LEMT 500 Word Project Brief, Project Title, Scope, Declaration and Sign-off Form' and submit it to the Service Delivery team via enquiries@euias.co.uk, for review **at gateway**.

LEMT 500 Word Project Brief, Project Title, Scope, Declaration and Sign-off Form	
Apprentice full name	
Apprentice signature: By signing this document I declare that the project brief, title and scope I am submitting is my own.	
Proposed Project Start Date	
Project manager's full name	
Project manager's signature: By signing this document I declare that the project brief, title and scope submitted is the apprentice's own.	
Employer details (Name and location)	
Training provider's details (Name and location)	
Read and confirm by checking the box opposite:	☐ The project is a significant and defined piece of work that has a real business application and benefit.
Project title:	
Project is based on, please select one and check the box:	☐ A specific problem ☐ A recurring issue ☐ An idea or opportunity
Project includes all of the following, please check the boxes to confirm:	☐ Maintenance ☐ Fault finding ☐ Repair related activity
Project is a desk study, a site-based project or a combination of both, please check the relevant box:	☐ Desk study ☐ Site-based project ☐ Desk study and Site-based project

LEMT 500 Word Project Brief, Project Title, Scope, Declaration and Sign-off Form	
Project explores technical leadership in maintenance concepts and practices in depth, covering the assessment themes listed opposite, please check the boxes to confirm:	☐ Health and safety: implementing health and safety policies, risk assessment ☐ Procedures and work instructions: following manufacturers' instructions, standard maintenance procedures ☐ Task management: planning and scheduling tasks, managing tasks, evaluating tasks ☐ Problem solving problem identification, application of methods to identify cause and solutions to problem, interpretation of engineering data applied to changes ☐ Technical leadership: technical leadership of maintenance, repair and fault-finding practices and techniques ☐ Communication: written communication techniques (informal and formal)
Project Scope Details - Complete the following (expand the area as required). My project's key performance indicators: My project's aims are: My project's objectives are:	

LEMT 500 Word Project Brief, Project Title, Scope, Declaration and Sign-off Form
Below write a short description no more than 500 words describing the key elements of your project (expand the box as required).

EUIAS Office use only

Date received	
Date signed off	
EUIAS Confirmation (check box if suitable to proceed)	☐ EUIAS confirm the 500 word project brief is suitable to proceed. ☐ EUIAS confirm the project title is suitable to proceed. ☐ EUIAS confirm the project scope is suitable to proceed.
EUIAS Outcomes	Where the above have not been signed-off the action(s) are as follows: Action(s): 500 word project brief Action(s): Project title Action(s): Project Scope

Appendix D: Practice Project: Report and Presentation with Questions Template

Instructions

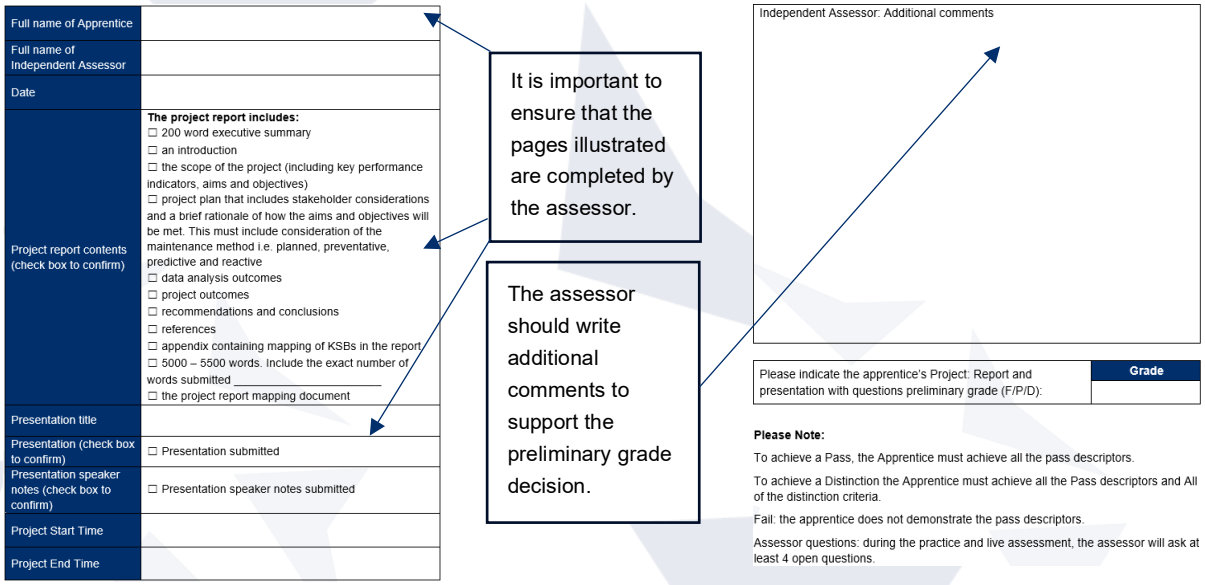
This should be read in conjunction with the LEMT Specification.

This template has been designed to help the person playing the part of the independent assessor and has three purposes:

1. To prepare for a practice assessment
2. Designed to holistically assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship by the apprentice
3. To provide feedback to the apprentice in preparation for the live assessment

The assessment takes part in two stages (report stage and presentation stage) with a judgment and grade being awarded after the second stage.

Quick Tip – How to complete the form below:



LEMT Component 2: Project: Report and Presentation with questions
Group 1 - Theme: Health and Safety
K2 Risk identification, risk assessments, mitigations and safe systems of work
S4 Identify and document risks and hazards in the workplace. Advise on and apply control measures
B2 Prioritise and promote health and safety

To achieve a pass the apprentice must achieve ALL the pass descriptors. To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Pass Check the box if achieved	Distinction Check the box if achieved
Undertakes risk assessment and completes documentation in compliance with regulations and company policy. Advises on and implements risk mitigation measures to promotes and prioritises health and safety within the workplace. **K2; S4 and B2** Project report page number(s): Presentation/speaker notes number(s):	☐	NA
Observed in the report:		
Observed in the presentation:		
Questions *Develop some open ended questions*		
Comments:		
Group 1 - Fail ☐		
Group 1: Pass ☐		

Check the box if the apprentice achieved K2;S4 and B2.

Include the page number of where the evidence has been observed and meets the KSBs above

State what evidence has been seen in the report/presentation in relation to the KSBs

If evidence is lacking state which KSB and reasons

Check the box to confirm the grade achieved.

Develop some open ended questions before the presentation in relation to the KSBs.

Practice Project: Report and Presentation with Questions Template

Full name of Apprentice	
Full name of Independent Assessor	
Date	
Project report contents (check box to confirm)	**The project report includes:** ☐ 200 word executive summary ☐ an introduction ☐ the scope of the project (including key performance indicators, aims and objectives) ☐ project plan that includes stakeholder considerations and a brief rationale of how the aims and objectives will be met. This must include consideration of the maintenance method i.e. planned, preventative, predictive and reactive ☐ data analysis outcomes ☐ project outcomes ☐ recommendations and conclusions ☐ references ☐ appendix containing mapping of KSBs in the report ☐ 5000 – 5500 words. Include the exact number of words submitted _____ ☐ the project report mapping document
Presentation title	
Presentation (check box to confirm)	☐ Presentation submitted
Presentation speaker notes (check box to confirm)	☐ Presentation speaker notes submitted
Presentation Start Time	
Presentation End Time	

Independent Assessor: Additional comments

Please indicate the apprentice's Project: Report and presentation with questions preliminary grade (F/P/D):	**Grade**

Please Note:

To achieve a Pass, the Apprentice must achieve all the pass descriptors.

To achieve a Distinction the Apprentice must achieve all the Pass descriptors and All of the distinction criteria.

Fail: the apprentice does not demonstrate the pass descriptors.

Assessor questions: during the practice and live assessment, the assessor will ask at least 4 open questions.

LEMT Component 2: Project: Report and Presentation with questions

Group 1 - Theme: Health and Safety

K2 Risk identification, risk assessments, mitigations and safe systems of work

S4 Identify and document risks and hazards in the workplace. Advise on and apply control measures

B2 Prioritise and promote health and safety

To achieve a pass the apprentice must achieve ALL the pass descriptors. To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Pass Check the box if achieved	Distinction Check the box if achieved
Undertakes risk assessment and completes documentation in compliance with regulations and company policy. Advises on and implements risk mitigation measures to promotes and prioritises health and safety within the workplace. **K2; S4 and B2** Project report page number(s): Presentation/speaker notes number(s):	☐	NA
Observed in the report:		
Observed in the presentation:		
Questions *Develop some open ended questions*		
Comments:		

Group 1 - Fail	☐	
Group 1: Pass	☐	

Group 2 - Theme: Procedures and work instructions
K10 Risk identification, risk assessments, mitigations and safe systems of work
S3 Follow manufacturers' instructions and standard maintenance procedures

To achieve a pass the apprentice must achieve ALL the pass descriptors. To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Pass Check the box if achieved	Distinction Check the box if achieved
Determines what manufacturer's instructions and standard operating procedures should be followed for the project and considers the impact of warranties on work. **K10 and S3.** Project report page number(s): Presentation/speaker notes number(s):	☐	NA
Observed in the report:		
Observed in the presentation:		
Questions *Develop some open ended questions*		
Comments:		

Group 2: Fail	☐	
Group 2: Pass	☐	

Group 3 - Theme: Task management

K5 Engineering materials (characteristics, properties and impact on use)
K7 Maintenance and engineering strategies, practices and techniques (planned, preventative, predictive and reactive).
K15 Planning, prioritising, work scheduling, workflow and time management techniques. Work management systems. Work categorisation systems.
K19 Resources: Human, physical, space, documentation, tooling, specialist equipment, spares and materials: Stock and services considerations.
K22 Deliver outcomes (including SWOT, stakeholder matrices, risk mapping and summary risk profiles).
S6 Plan and schedule tasks, projects or resources in the workplace
S7 Manage tasks, projects or resources in the workplace.
S8 Evaluate tasks, projects or resources in the workplace

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Outlines the planning and scheduling tasks to meet the project brief considering: • engineering materials (characteristics, properties and impact on use) • maintenance and engineering strategies, practices and techniques (planned, preventative, predictive and reactive) • resources (human, physical, space, documentation, tooling, specialist equipment,	☐ ☐	Analyses their planning and scheduling of resources to identify areas of improvement to benefit the business. **K15; K19 and S6** Project report page number(s): Presentation/speak notes number(s):	☐

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
spares and materials, stock and services). **K5; K7; K19 and S6** Project report page number(s): Presentation slide number(s):	☐		
Applies selected project management techniques to: • deliver outcomes (including SWOT, stakeholder matrices, risk mapping and summary risk profiles) • plan and prioritises tasks • use (where appropriate) work scheduling, workflow and time management techniques, work management and or categorisation systems. **K15, K22 and S7** Project report page number(s): Presentation slide number(s): Evaluates the workplace engineering maintenance tasks undertaken for the project**. S8** Project report page number(s): Presentation slide number(s):	☐ ☐ ☐ ☐	Evaluates their own management of tasks, projects or resources, including the techniques, timescales and tools used. **K22 and S7.** Project report page number(s): Presentation slide number(s):	☐

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Observed in the report:			
Observed in the presentation:			
Questions *Develop some open ended questions*			
Comments:			

Group 3 - Fail	☐
Group 3 - Pass	☐
Group 3 - Distinction	☐

Group 4 - Theme: Problem Solving

K6 Problem solving techniques: diagnostics, root cause analysis, 6 thinking hats, DMAIC (Define, Measure, Analyse, Improve, Control), PDCA (Plan Do Check Act). Fault finding techniques: root cause analysis, 5 Whys', fishbone, half-split.
K4 Engineering mathematical and scientific principles: methods, techniques, graphical expressions, symbols, formulae and calculations.
S17 Identify problems and apply methods to identify causes and solutions. Escalate issues or concerns.
S19 Interpret and use information from engineering data sources to apply changes.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Applies problem solving techniques in line with the project brief to identify specific causes and solutions, escalating issues or concerns within the scope of their responsibility**. K6, S17** Project report page number(s): Presentation/speaker notes number(s):	☐	Analyses their choice of applied problem-solving techniques, identifying the benefits and risks to meeting the project objectives. **K6, S17** Project report page number(s): Presentation/speaker notes number(s):	☐
Interprets engineering data and applies mathematical and scientific principles to decision making to achieve project objectives. **K4, S19** Project report page number(s): Presentation/speaker notes number(s):	☐	Justifies their choice of mathematical and scientific principles to interpret data and inform decision making within the project delivery**. K4, S19** Project report page number(s): Presentation/speaker notes number(s):	☐
Observed in the report:			

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Observed in the presentation:			
Questions: *Develop some open ended questions*			
Comments:			

Group 4 - Fail	☐	
Group 4 - Pass	☐	
Group 4 - Distinction	☐	

Group 5 - Theme: Technical Leadership

K8 Standard operating procedures and work instructions: rationale, review and updates.
K9 Engineering, manufacturing and maintenance technical information, related documentation, such as job records, service reports, checklists and condemn notices; representations, drawings, graphical information, visuals and symbols.

S14 Provide technical leadership for maintenance practices and techniques.

S15 Provide technical leadership for repair practices and techniques.

S16 Provide technical leadership for fault finding techniques and practices.

To achieve a pass the apprentice must achieve ALL the pass descriptors. To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Pass Check the box if achieved	Distinction Check the box if achieved
Provides technical leadership, to complete maintenance, fault-finding and repair tasks in line with the project brief, considering: • the engineering practices and techniques used • the standard operating procedures and work instructions followed • the selection and use of technical documents and recording of information **K8, K9, S14, S15, S16** Project report page number(s): Presentation/speak notes number(s):	☐	NA
Observed in the report:		
Observed in the presentation:		
Questions *Develop some open ended questions*		

To achieve a pass the apprentice must achieve ALL the pass descriptors. To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.		Pass Check the box if achieved	Distinction Check the box if achieved
Comments:			
Group 5 - Fail	☐		
Group 5 - Pass	☐		

Group 6 - Theme: Communication

K17 Communication techniques: written. Writing using plain English principles. Report writing.
S10 Communicate in writing.

To achieve a pass the apprentice must achieve ALL the pass descriptors. To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Pass Check the box if achieved	Distinction Check the box if achieved
Uses written communication techniques suitable for the context, adapting style and use of terminology to suit the audience. Uses sector and industry terminology correctly. **K17 and S10** Project report page number(s): Presentation/speak notes number(s):	☐	NA
Observed in the report:		
Observed in the presentation:		
Questions *Develop some open ended questions*		
Comments:		

Group 6 - Fail	☐	
Group 6 - Pass	☐	

Appendix E: Practice Professional Discussion Template

Employers/training providers are recommended to arrange for apprentices to carry out a practice Professional Discussion prior to end-point assessment.

Instructions

This should be read in conjunction with the LEMT Specification.

This template has been designed to help the suitable person playing part of the independent assessor and has three purposes:

1. To prepare for a practice assessment
2. Designed to holistically assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship by the apprentice
3. To provide feedback to the apprentice in preparation for the live assessment

The assessor should:

- complete the form below which has two parts to assess the apprentice's Professional Discussion.
- review the apprentice's portfolio of evidence before the practice assessment

Quick Tip – How to complete the form below:

Name of Apprentice	
Location(s) of Practice Professional Discussion	
Name of Independent Assessor	
Date of Practice Professional Discussion	
Start Time	
End Time	
Independent Assessor: Additional Comments	

Please indicate the apprentice's practice professional discussion preliminary grade (F/P/D):	**Grade**

Please Note:

To achieve a Pass, the Apprentice must achieve all the pass descriptors.

To achieve a Distinction, the Apprentice must achieve all the pass and all the distinction descriptors.

Fail: the apprentice does not demonstrate the pass descriptors.

During the live assessment, the assessor will ask at least 7 open ended questions.

It is important to ensure that the page illustrated is completed by the assessor.

The assessor should write additional comments to support the preliminary grade decision.

LEMT Component 3: Professional discussion based on the portfolio of evidence

Group 1 - Theme: Health and Safety

K1 Awareness of health and safety regulations, relevance to the occupation and the technician's responsibilities. Health and safety regulations

S1 Comply with health and safety regulations and procedures. Apply safe systems of work.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Describes how they select and apply health and safety regulations appropriate to the task, their occupation, and technician's responsibilities, complying with safe systems of work in line with company policies. **K1 and S1.** Portfolio page number(s):	☐	Analyses the extent to which adhering to safe systems of work and health and safety regulations impacts on workplace schedules and maintenance procedures. **K1 and S1.** Portfolio page number(s):	☐
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			
Group 1 - Fail ☐	**Group 1 - Pass** ☐	**Group 1 - Distinction** ☐	
Audio recording the questions that are asked reference/timeline			

Check the pass/distinction box if the apprentice achieved K1 and S1.

Include the page number of where the evidence has been observed and meets the KSBs above

State the evidence that has been seen in the portfolio of evidence in relation to the KSBs

Check the fail, pass or distinction box to confirm the grade for this group..

Record the time the question is asked.

Develop some open ended questions in relation to the KSBs

Name of Apprentice	
Location(s) of Practice Professional Discussion	
Name of Independent Assessor	
Date of Practice Professional Discussion	
Start Time	
End Time	
Independent Assessor: Additional Comments	

	Grade
Please indicate the apprentice's practice professional discussion preliminary grade (F/P/D):	

Please Note:

To achieve a Pass, the Apprentice must achieve all the pass descriptors.

To achieve a Distinction, the Apprentice must achieve all the pass and all the distinction descriptors.

Fail: the apprentice does not demonstrate the pass descriptors.

During the live assessment, the assessor will ask at least 7 open ended questions.

LEMT Component 3: Professional discussion based on the portfolio of evidence

Group 1 - Theme: Health and Safety

K1 Awareness of health and safety regulations, relevance to the occupation and the technician's responsibilities. Health and safety regulations

S1 Comply with health and safety regulations and procedures. Apply safe systems of work.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Describes how they select and apply health and safety regulations appropriate to the task, their occupation, and technician's responsibilities, complying with safe systems of work in line with company policies**. K1 and S1.** Portfolio page number(s):	☐	Analyses the extent to which adhering to safe systems of work and health and safety regulations impacts on workplace schedules and maintenance procedures. **K1 and S1.** Portfolio page number(s):	☐
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			

Group 1 - Fail	☐	**Group 1 - Pass**	☐	**Group 1 - Distinction**	☐

Group 2 - Theme: Environment and Sustainability
K3 Awareness of environment and sustainability regulations, relevance to the occupation and the technician's responsibilities. Environment and sustainability. Environmental Protection Act - responsibilities. Types of pollution and control measures: noise, smells, spills, and waste. Sustainability. Resource Management. Environmental permits. Waste management. Waste Electrical and Electronic Equipment Directive (WEEE). Hazardous waste regulations. Re-cyclable materials and waste disposal procedures. Energy consumption and usage profiling. Data logging to optimise energy performance. The Climate Change Agreements. Carbon Reduction Commitment (CRC).
S2 Comply with environmental and sustainability regulations and procedures when using resources. Segregate resources for re-use, recycling and disposal applying sustainability principles.
B1 Prioritise and promote the environment and sustainability.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Analyses the extent to which the re-use, recycling and disposal of resources within the company is in line with environmental and sustainability regulations and procedures. **K3, S2 and B1.** Portfolio page number(s):		Evaluates how current working practices in their role prioritise and promote the environment and sustainability. **K3, S2 and B1.** Portfolio page number(s):	
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			

Group 2 - Fail	☐	**Group 2 - Pass**	☐	**Group 2 - Distinction**	☐

Group 3 - Theme: People Management

K12 The function of an engineering maintenance department. Limits of autonomy and reporting channels. Different teams and functions involved in operation and interdependencies.
K13 Leadership and management techniques: customer relationship management, negotiating, influencing, networking, commercial awareness, conflict management and assertiveness.
K14 Workplace training and development and competence assurance techniques in the workplace. How to pass on knowledge to colleagues and provide guidance to customers or stakeholders.
K16 Verbal communication techniques: Matching style to audience. Barriers in communication and how to overcome them. Engineering terminology.
K25 Equality, diversity and inclusion in the workplace.
S9 Communicate with colleagues and stakeholders verbally.
S11 Negotiate with colleagues or stakeholders. For example, to access equipment or arrange system outage.
S12 Identify potential conflicts and apply resolution strategies.
S13 Identify training needs of team members in the workplace.
B3 Apply a professional approach.
B5 Committed to professional development of self and others.
B7 Act ethically.
B8 Collaborate within teams, across disciplines and external stakeholders.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Describes how they select and apply communication techniques appropriate to the audience, using the correct engineering terminology and delivered by	☐	Analyses the techniques they use to overcome issues faced during negotiations or conflict resolution,	☐

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
applying a professional approach in line with company policies and procedures. **K16, S9 and B3.** Portfolio page number(s):		explaining the impact these have on the business. **K13, S11 and S12** Portfolio page number(s):	
Justifies their choice of leadership and management technique when dealing with customer relations, negotiation, influencing, networking, commercial awareness, conflict resolution and assertiveness in line with the ethical standards set out in company policies and procedures. (**K13, S11, S12 and B7**) Portfolio page number(s):	☐		
Outlines the function(s) of their engineering maintenance department, the limits of their autonomy, identifies reporting channels, collaborates with departmental teams, other disciplines and external stakeholders. (**K12 and B8**) Portfolio page number(s):	☐	Analyses the impact professional development of themselves and others has on business performance. (**K14, S13 and B5**) Portfolio page number(s):	☐
Explains how they identify the training needs of team members in the workplace and establish an approach to co-worker's workplace training and competence assurance which is in line with organisational guidelines and policies on equality, diversity and inclusion. Assumes responsibility for their own	☐		

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
personal development and shares expertise gained to build the capability of colleagues within their team(s). (**K14, K25, S13 and B5)** Portfolio page number(s):			
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			

Group 3 - Fail	☐	**Group 3 - Pass**	☐	**Group 3 - Distinction**	☐

Group 4 - Theme: Engineering Standards

K11 Awareness of engineering international, national and regulatory standards, relevance to the occupation and technician's responsibilities. British Standards (BS). International Organisation for Standardisation standards (ISO). European Norm (EN).

K18 The engineering maintenance sector. Regulators. Types of employers. Clients. Supply chain. Stakeholders. Audits.

K20 Awareness of Quality Management Systems (QMS) and the principles of Quality Control and Assurance, principles and practice in a maintenance and engineering environment. Relevance to the occupation and the technician's responsibilities.

S18 Comply with engineering standards and regulations. For example, ISO9001.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Outlines the structure of the engineering maintenance sector, has an awareness of quality control and management systems and compliance with regulatory standards, applying them to a maintenance environment specific to their role. **(K11, K18, K20, S18)** Portfolio page number(s):	☐	Evaluates how compliance with engineering standards and or regulations impacts business outcomes. (**K11, K18, K20, S18**) Portfolio page number(s):	☐
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			

Group 4 - Fail	☐	**Group 4 - Pass**	☐	**Group 4 - Distinction**	☐

Group 5 - Theme: Continuous Improvement

K21 Continuous improvement techniques: lean, 6-sigma, KAIZEN, 5 S (Sort, set, shine, standardise and sustain).

S20 Lead on continuous improvement projects. Apply continuous improvement techniques. Devise suggestions for improvement.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Leads continuous improvement projects and applies continuous improvement techniques to these including lean, 6-sigma, KAIZEN, and the 5S's, outlining suggestions for improvement. **K21 and S20** Portfolio page number(s):	☐	Evaluates the impact of suggestions from a continuous improvement project on either maintenance procedures and or business outcomes. **K21 and S20** Portfolio page number(s):	☐
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			

Group 5 - Fail	☐	**Group 5 - Pass**	☐	**Group 5 - Distinction**	☐

Group 6 - Theme: Handovers

K24 Business operation considerations: efficiency, customer satisfaction, competitiveness, minimising risks to operation, finance, business ethics and licenses.

S21 Manage technical handover of completed repair or maintenance activity.

B6 Take responsibility for work.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Analyses business operation considerations, including efficiency, customer satisfaction, competitiveness, minimising risks to operation, finance, business ethics and licenses with respect to their role. Manages the technical handover of repair and or maintenance activities taking responsibility for the quality of finished work in line with company policies and procedures. **K24, S21 and B6** Portfolio page number(s):	☐		
Observed in the portfolio:			
Questions: *Develop some open ended questions*			
Comments:			

Group 6 - Fail	☐	**Group 6 - Pass**	☐

Group 7 - Theme: Information Technology

K23 Information technology: Management Information Systems (MIS), spreadsheets, presentation, word processing, email, virtual communication and learning platforms. General Data Protection Regulation (GDPR). Documentation and data collection: principles, methods and requirements - electronic and paper. Analytical data, job records, timekeeping, service reports, checklists and condemn notices. Technological development and innovation in the engineering sector. Industry 4.0. IT networking and digital twinning.

S5 Record or enter information - paper based or electronic. For example, job sheets, risk assessments, equipment service records, test results, handover documents and manufacturers' documentation, asset management records, work sheets, checklists, waste environmental records and any legal reporting requirements.

S22 Use information technology. For example, for document creation, communication, and information management in line with breakdown, repair and maintenance activities. Comply with GDPR.

B4 Promote adoption of emerging and advanced engineering and maintenance technologies.

To achieve a pass the apprentice must achieve ALL the pass descriptors.	Pass Check the box if achieved	To achieve a distinction the apprentice must pass ALL the pass descriptors and ALL of the Distinction descriptors.	Distinction Check the box if achieved
Outlines their use of information technology to record or enter information including MIS, spreadsheets, presentation, word processing, email, virtual communication and learning platforms, for documentation and data collection, collecting analytical data, job records, timekeeping, service reports, checklists and condemn notices. Applies General Data Protection Regulation (GDPR). Adheres to company policy to promote technological development and innovation in the engineering	☐	Evaluates the impact of adopting emerging and advancing engineering and maintenance technologies across workplace activities. (**K23 and S22**) Portfolio page number(s):	☐

maintenance sector including industry 4.0. IT networking and digital twinning. (**K23, S5, S22 and B4**) Portfolio page number(s):					
Observed in the portfolio:					
Questions: *Develop some open ended questions*					
Comments:					
Group 7 - Fail	☐	**Group 7 - Pass**	☐	**Group 7 - Distinction**	☐

Appendix F: Section 1 Project: Report Mapping Document

Project Report Mapping Document

This document must be placed at the front of the project report and submitted to EUIAS with the project report.

Introduction

Use this document to map the project report to the KSBs which will be holistically assessed during section 2 presentation with questions.

Apprentice's next steps

1. Complete all the details on the first page and include employer details of where relevant competencies from their experience at work was gained.
2. Map evidence to the criteria in the following pages using a referencing system indicating where the evidence for the criteria is located in the project report e.g., paragraph number, diagram including page number. This will allow the independent assessor to locate the section or specific piece of evidence being discussed and/or referred to during the presentation with questions.
3. Place the project report mapping document at the front of the project report.

The apprentice's training provider must make arrangements for EUIAS to have access to the apprentice's project report including the project report mapping document **to EUIAS by the end of week 13 of the End-point Assessment (EPA) period.** For apprentices using e-portfolios such as ONEFILE, SMARTASSESSOR, the reference used must simply be the file or folder name you used when uploading the evidence to such systems.

Project Report Mapping Document

1.1 Mapping Sign off on Project Report Completion:

Apprentice Name (Print)	Apprentice Signature	Training Provider (Company)	Training Provider Signatory	Date of Sign Off

Health and Safety Core Knowledge, Skills and Behaviour:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K2	Risk identification, risk assessments, mitigations and safe systems of work.			
S4	Identify and document risks and hazards in the workplace. Advise on and apply control measures.			
B2	Prioritise and promote health and safety.			

Procedures and Work Instructions Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K10	Manufacturers' instructions: what they are and how to use them. Warranties: what they are and impact on engineering maintenance work.			
S3	Follow manufacturers' instructions and standard maintenance procedures			

Task Management Core Knowledge and Skills:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K5	Engineering materials: characteristics, properties and impact on use.			
K7	Maintenance and engineering strategies, practices and techniques: planned, preventative, predictive and reactive.			
K15	Planning, prioritising, work scheduling, workflow and time management techniques. Work management systems. Work categorisation systems.			
K19	Resources: Human, physical, space, documentation, tooling, specialist equipment, spares and materials: Stock and services considerations			
K22	Project management techniques: Strengths, Weaknesses, Opportunities, Threats (SWOT), stakeholder matrices, risk mapping and summary risk profiles.			
S6	Plan and schedule tasks, projects or resources in the workplace.			
S7	Manage tasks, projects or resources in the workplace.			
S8	Evaluate tasks, projects or resources in the workplace			

Problem Solving Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K4	Engineering mathematical and scientific principles: methods, techniques, graphical expressions, symbols, formulae and calculations.			
K6	Problem solving techniques: diagnostics, root cause analysis, 6 thinking hats, DMAIC (Define, Measure, Analyse, Improve, Control), PDCA (Plan Do Check Act). Fault finding techniques: root cause analysis, 5 Whys', fishbone, half-split.			
S17	Identify problems and apply methods to identify causes and solutions. Escalate issues or concerns.			
S19	Interpret and use information from engineering data sources to apply changes.			

Technical Leadership Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K8	Standard operating procedures and work instructions: rationale, review and updates.			
K9	Engineering, manufacturing and maintenance technical information, related documentation, such as job records, service reports, checklists and condemn notices; representations, drawings, graphical information, visuals and symbols.			
S14	Provide technical leadership for maintenance practices and techniques.			
S15	Provide technical leadership for repair practices and techniques.			
S16	Provide technical leadership for fault finding techniques and practices.			

Communication Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K17	Communication techniques: written. Writing using plain English principles. Report writing.			
S10	Communicate in writing.			

Appendix G: Portfolio Mapping Document

Portfolio Mapping Document

This document must be placed at the front of the portfolio and submitted to EUIAS with the portfolio of evidence.

Introduction

Use this document to map the portfolio of evidence to the KSBs assessed during the professional discussion.

Apprentice's next steps

1. Complete all the details on the first page and include employer details of where relevant competencies from their experience at work was gained.
2. The can use a number of different types of evidence to demonstrate their competence as described in Section 5 of the Specification – 'What to include in the portfolio?'. For further guidance, the apprentice must seek advice from their tutor/supervisor/mentor and training provider.
3. Map evidence to the criteria in the following pages using a referencing system indicating where the evidence for the criteria is located in the portfolio e.g., work based evidence Job 1 (J1) page 5 paragraph 2. This will allow the independent assessor to locate the section or specific piece of evidence being discussed and referred to during the professional discussion.
4. Place the portfolio mapping document at the front of the portfolio of evidence.

The apprentice's training provider must make arrangements for EUIAS to have access to the apprentice's portfolio including the portfolio mapping document at least 2 weeks before the professional discussion. For apprentices using e-portfolios such as ONEFILE, SMARTASSESSOR, the reference used must simply be the file or folder name you used when uploading the evidence to such systems.

Portfolio Mapping Document

1.1 Mapping Sign off on Portfolio Completion:

Apprentice Name (Print)	Apprentice Signature	Training Provider (Company)	Training Provider Signatory	Date of Sign Off

Health and Safety Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K1	Awareness of health and safety regulations, relevance to the occupation and the technician's responsibilities. Health and safety regulations.			
S1	Comply with health and safety regulations and procedures. Apply safe systems of work.			

Environmental and Sustainability Core Knowledge, Skill and Behaviour:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K3	Awareness of environment and sustainability regulations, relevance to the occupation and the technician's responsibilities. Environment and sustainability. Environmental Protection Act - responsibilities. Types of pollution and control measures: noise, smells, spills, and waste. Sustainability. Resource Management. Environmental permits. Waste management. Waste Electrical and Electronic Equipment Directive (WEEE). Hazardous waste regulations. Re-cyclable materials and waste disposal procedures. Energy consumption and usage profiling. Data logging to optimise energy performance. The Climate Change Agreements. Carbon Reduction Commitment (CRC).			
S2	Comply with environmental and sustainability regulations and procedures when using resources. Segregate resources for re-use, recycling and disposal applying sustainability principles.			
B1	Prioritise and promote the environment and sustainability.			

People Management Core Knowledge, Skills and Behaviours:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K12	The function of an engineering maintenance department. Limits of autonomy and reporting channels. Different teams and functions involved in operation and interdependencies.			
K13	Leadership and management techniques: customer relationship management, negotiating, influencing, networking, commercial awareness, conflict management and assertiveness.			
K14	Workplace training and development and competence assurance techniques in the workplace. How to pass on knowledge to colleagues and provide guidance to customers or stakeholders.			
K16	Verbal communication techniques: Matching style to audience. Barriers in communication and how to overcome them. Engineering terminology.			
K25	Equality, diversity and inclusion in the workplace.			
S9	Communicate with colleagues and stakeholders verbally.			
S11	Negotiate with colleagues or stakeholders. For example, to access equipment or arrange system outage			
S12	Identify potential conflicts and apply resolution strategies.			
S13	Identify training needs of team members in the workplace.			
B3	Apply a professional approach.			

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
B5	Committed to professional development of self and others.			
B7	Act ethically.			
B8	Collaborate within teams, across disciplines and external stakeholders.			

Engineering Standards Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K11	Awareness of engineering international, national and regulatory standards, relevance to the occupation and technician's responsibilities. British Standards (BS). International Organisation for Standardisation standards (ISO). European Norm (EN).			
K18	The engineering maintenance sector. Regulators. Types of employers. Clients. Supply chain. Stakeholders. Audits.			
K20	Awareness of Quality Management Systems (QMS) and the principles of Quality Control and Assurance, principles and practice in a maintenance and engineering environment. Relevance to the occupation and the technician's responsibilities.			
S18	Comply with engineering standards and regulations. For example, ISO9001.			

Continuous Improvement Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K21	Continuous improvement techniques: lean, 6-sigma, KAIZEN, 5 S (Sort, set, shine, standardise and sustain).			
S20	Lead on continuous improvement projects. Apply continuous improvement techniques. Devise suggestions for improvement.			

Handovers Core Knowledge and Skill:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K24	Business operation considerations: efficiency, customer satisfaction, competitiveness, minimising risks to operation, finance, business ethics and licenses.			
S21	Manage technical handover of completed repair or maintenance activity.			
B6	Take responsibility for work.			

Information Technology Core Knowledge, Skills and Behaviour:

Ref. (KSB)	Apprenticeship Standard Criteria	Project Report EVIDENCE REFERENCE (Apprentice Input)		
		1	2	3
K23	Information technology: Management Information Systems (MIS), spreadsheets, presentation, word processing, email, virtual communication and learning platforms. General Data Protection Regulation (GDPR). Documentation and data collection: principles, methods and requirements - electronic and paper. Analytical data, job records, timekeeping, service reports, checklists and condemn notices. Technological development and innovation in the engineering sector. Industry 4.0. IT networking and digital twinning.			
S5	Record or enter information - paper based or electronic. For example, job sheets, risk assessments, equipment service records, test results, handover documents and manufacturers' documentation, asset management records, work sheets, checklists, waste environmental records and any legal reporting requirements.			
S22	Use information technology. For example, for document creation, communication, and information management in line with breakdown, repair and maintenance activities. Comply with GDPR.			
B4	Promote adoption of emerging and advanced engineering and maintenance technologies.			

Appendix H: LEMT Workplace Regulations

1. Health & Safety at Work Act (H&SAWA)
2. Workplace Health, Safety and Welfare Regulations
3. Management of Health and Safety at Work Regulations
4. The Working Time Regulations
5. Environmental Protection Act
6. Office of Nuclear Regulation (ONR)
7. Maritime Pollutions Regulations (MARPOL)
8. The Electricity at Work Regulations
9. Provision and Use of Work Equipment Regs (PUWER)
10. Manual Handling Regulations
11. Lifting Operations and Lifting Equipment Regulations (LOLER)
12. Working at Height Regulations
13. The Confined Spaces Regulations
14. Control of Substances Hazardous to Health Regulations (COSHH)
15. Personal Protective Equipment at Work Regulations (PPE)
16. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
17. The Control of Noise at Work Regulations
18. The Health and Safety (Display Screen Equipment) Regulations
19. The General Data Protection Regulations (GDPR)
20. The Electrical Equipment (Safety) Regulations
21. The Waste Electric and Electronic Equipment Regulations (WEEE)
22. The Hazardous Waste Regulations

**Publication dates omitted
***List for guidance only

Appendix I: Lead Engineering Maintenance Technician Supporting Documents ‘LEMT Final Submission Project: Report and Presentation Declaration and Sign-off Form’.

Instructions

This form has two purposes:

1. To confirm the Project: Report, presentation including speaker notes and supporting materials is the apprentice’s own work
2. For all parties (Apprentice; Project Manager and EUIAS) to provide declarations and sign-offs

Complete the ‘LEMT Final Submission Project: Report and Presentation Declaration and Sign-off Form’ and submit it to the Service Delivery team via enquiries@euias.co.uk, for review **at gateway**.

LEMT Final Submission Project: Report and Presentation Declaration and Sign-off Form	
Apprentice full name	
Apprentice signature: By signing this this document I declare that the Project: Report, Presentation including speaker notes and supporting materials I am submitting is my own.	
Start Date	
Date Submitted to EUIAS	
Project manager's full name	
Project manager's signature: By signing this document I declare that the Project: Report, Presentation including speaker notes and supporting materials submitted is the apprentice's own.	
Employer details (Name and location)	
Training provider's details (Name and location)	

EUIAS Office use only

Date received	
Date signed off	