

End Point Assessment Plan

Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing) Standard

Version 14 June 2016

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Foreword

The Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing) assessment plan is delivered within the three phases of the Apprenticeship standard, these being the:

- Foundation Phase
- Development Phase
- End Point Assessment & Employer Endorsement Phase

Taken together the assessment approach we detail here is fundamentally different and represents a significant improvement on current assessment systems, namely:

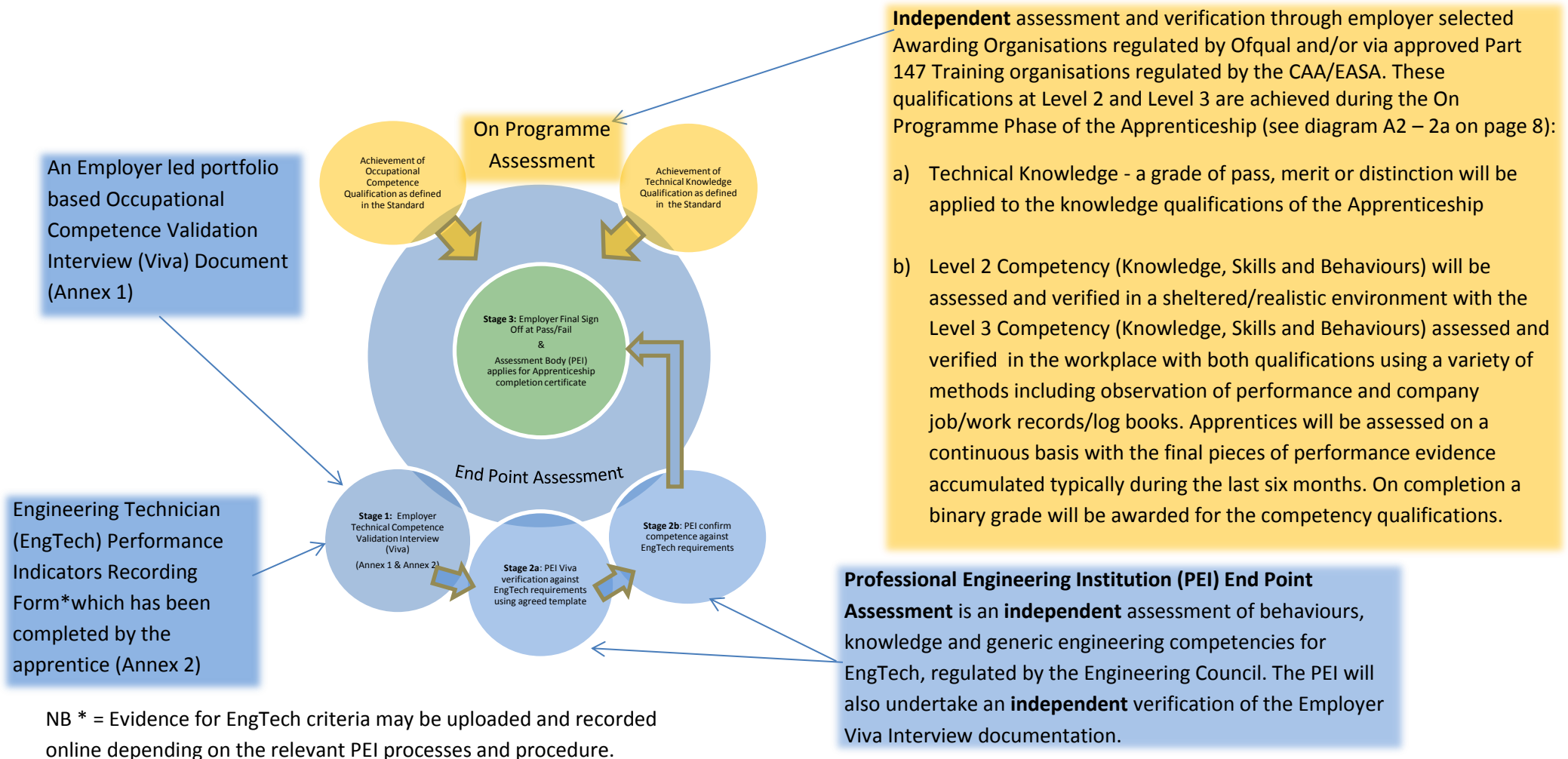
- 1) We have introduced a formal gate review at the conclusion of the foundation stage. Apprentices will not progress beyond this without successful completion of this stage.
- 2) We have introduced a viva and formal overall assessment of competence as part of the end point assessment for the Aviation Sector. They will need to demonstrate skills, knowledge and behaviours developed across the Apprenticeship.
- 3) We have introduced an alignment of competence to 'Engineering Technician' requirements - the recognised generic professional industry standard for Engineering Technicians. This is totally new and is supported by all the relevant Professional Engineering Institutions. This provides an opportunity to establish future development activity for apprentices, linked to continued professional development. In the case of the Military we have introduced an alignment to the trade specific Military Professional Competence requirements.

Due to the safety critical and complex nature of Aircraft Maintenance Fitter/Technician training which is externally regulated, training and assessment must be carried out 'on a continuous basis' to ensure that the skills, knowledge and behaviours that relate to company processes and procedures are fully imbedded in the apprentice's skill set. Because of the safety critical nature of the work roles and the risks to both the apprentice and the business any deficiencies or gaps in skills, knowledge and behaviours must be identified early and corrected rather than being allowed to proliferate, only then to be picked up at the end of training when it is too late. Organisations that maintain repair and overhaul Aircraft fall under the jurisdiction of The UK Civil Aviation Authority (UKCAA) who are governed by the COMMISSION REGULATION (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks. To this end it is incumbent on the employer to ensure and confirm that all appropriate fitters/technicians are occupationally competent and meet the required continuing airworthiness requirements/ legislation. Moreover, employers in the Aviation sector are responsible for the competence of their employees and nobody other than the employer will be able to confirm occupational competence. The assessment process we have adopted is more robust than ever before and comprises three distinct separate components: academic/technical competence confirmed through qualifications by Awarding Organisations, professional competence confirmed by the relevant Professional Engineering Institution and crucially occupational competence confirmed by the employer.

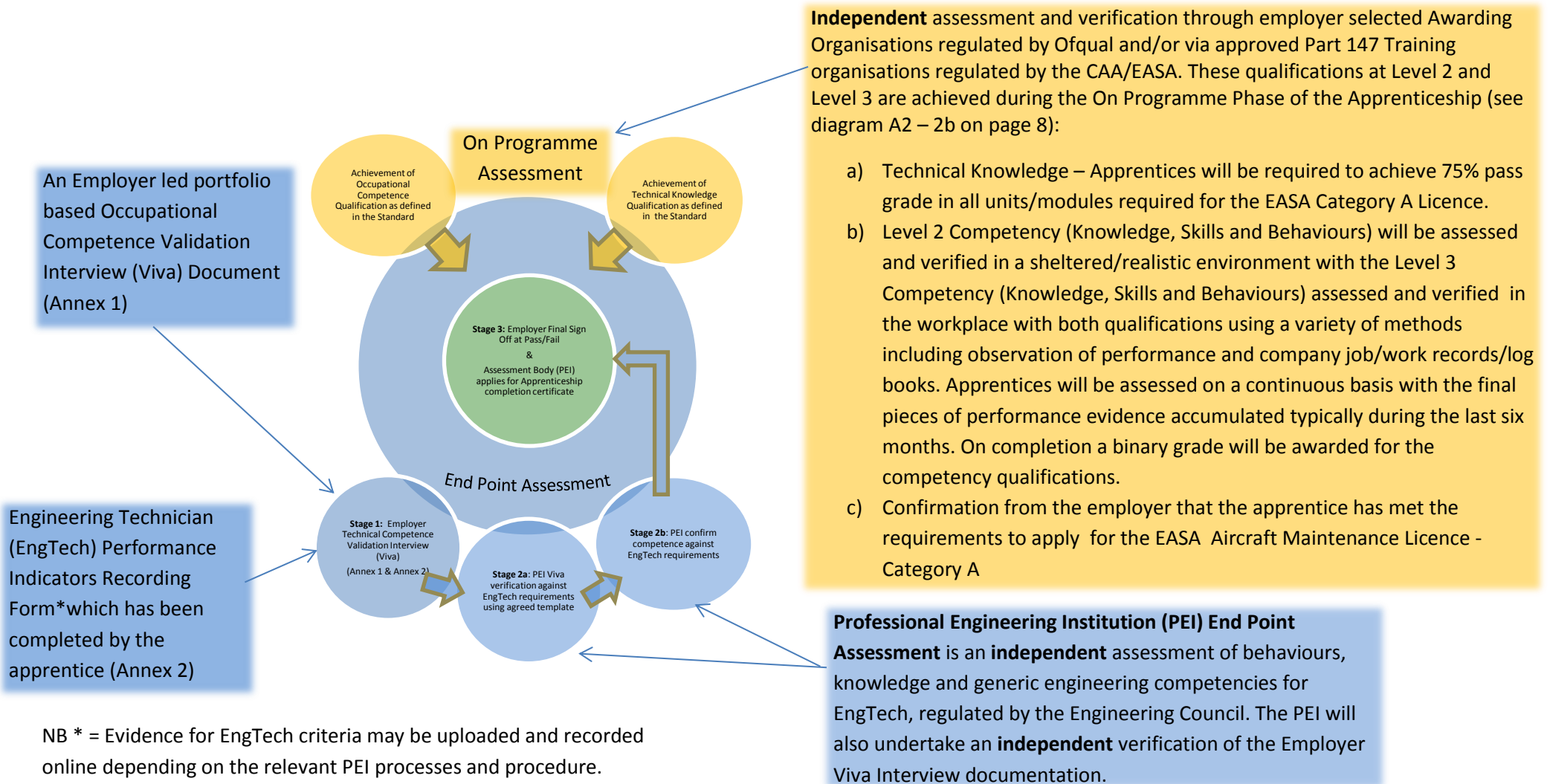
The assessment model, including end point, makes the Standard accessible and appropriate for employers, including SMEs. The mandatory requirements have been carefully selected to ensure that skills, knowledge and behaviours can be transferred across the Advanced Manufacturing and Engineering Sector. (Aviation MRO Sector Trailblazer Group, April 2015)

Section A: Summary of End Point Assessment

A1 Diagram 1a: End Point Assessment for an Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing)



In order for the PEI to apply for the apprenticeship completion certificate an apprentice will need to have achieved the on programme competency and a knowledge qualifications at Level 2 and Level 3 as specified on this Standard. The PEI will also be in receipt of and have verified the Employer Portfolio Based Occupational Competence Viva Interview document signed by the employer (Stages 1 and 2a); they will have confirmed that the apprentice has met Engineering Technician UKSPEC requirements (Stage 2b) and have received a **final** overall apprentice sign off from the employer. (Stage 3).

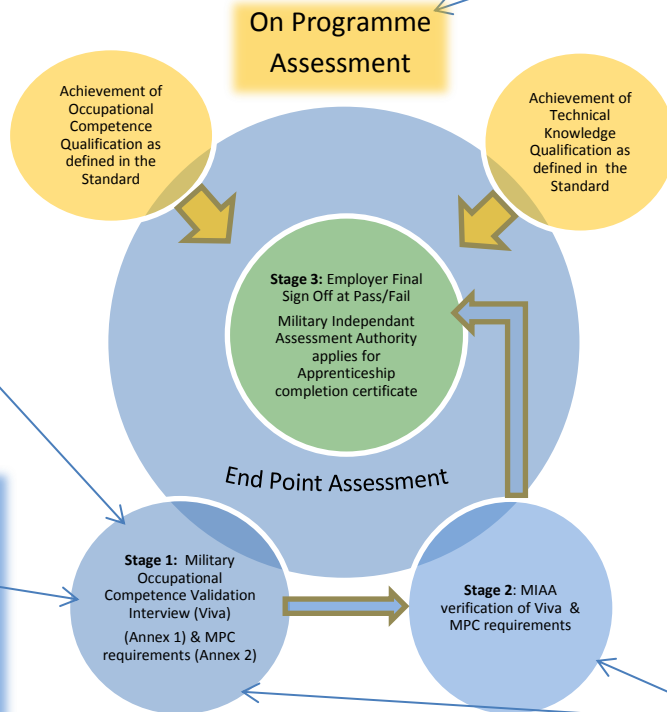
A1 Diagram 1b: End Point Assessment for an Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing) – EASA Licence Category A

In order for the PEI to apply for the apprenticeship completion certificate an apprentice will need to have achieved the on programme competency and a knowledge qualifications at Level 2 and Level 3 as specified on this Standard. The PEI will also be in receipt of and have verified the Employer Portfolio Based Occupational Competence Viva Interview document signed by the employer (Stages 1 and 2a); they will have confirmed that the apprentice has met Engineering Technician UKSPEC requirements (Stage 2b) and have received a **final** overall apprentice sign off from the employer. (Stage 3).

A1 Diagram 1c: End Point Assessment for an Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing) – Military Pathway

An Employer led portfolio based Military Occupational Competence Validation Interview (Viva) Document (Annex 1)

Military Professional Competence Indicators recording Form which has been completed by the Apprentice (Annex 2).



Independent assessment and verification and quality assurance through employer approved Awarding Organisations regulated by Ofqual. These qualifications at Level 2 and Level 3 are achieved during the On Programme Phase of the Apprenticeship (see diagram A2 on page 10):

- Technical Knowledge - a grade of pass, merit or distinction will be applied to the knowledge qualifications of the Apprenticeship
- Level 2 Competency (Knowledge, Skills and Behaviours) will be assessed and verified in a sheltered/realistic environment with the Level 3 Competency (Knowledge, Skills and Behaviours) assessed and verified in the workplace with both qualifications using a variety of methods including observation of performance and company job/work records/log books. Apprentices will be assessed on a continuous basis with the final pieces of performance evidence accumulated typically during the last six months. On completion a binary grade will be awarded for the competency qualifications.

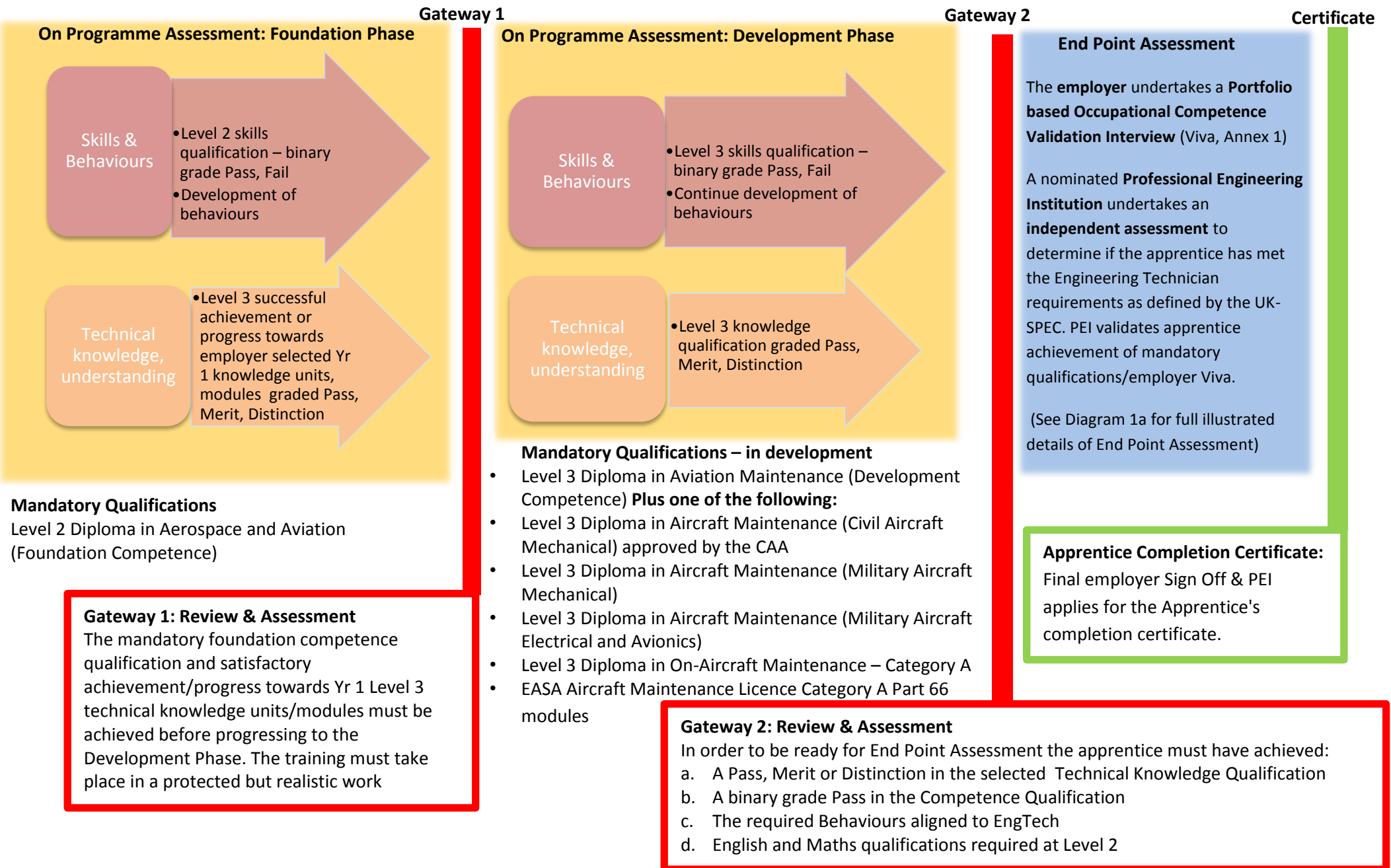
Military Independent Assessment Authority (MIAA) End Point Assessment is an **independent** assessment of behaviours, knowledge and generic engineering competencies for Military Professional Competence. The MIAA will also undertake an independent verification of the Employer Viva Interview documentation.

The Military Independent Assessment Authority (MIAA) will apply for the apprenticeship completion certificate only when the on programme competency and a knowledge qualifications are completed, it has verified the Viva Interview document signed by the employer (Stages 1 and 2) and will also have received a **final** overall apprentice sign off from the employer (Stage 3).

In all military cases, the on-programme training is the responsibility of the respective training school, the employer is the line management of the Main Operating Base where the apprentice is stationed when they leave training; the Training Requirements Authority (TRA) set the competence standards required and the Military Independent Assessment Authority is responsible for independent assessment of their respective apprenticeship programme.

Each arm of the service involved in the process is an autonomous business unit with separate funding. They each have their own, safety critical, standards to maintain, with no incentive or opportunity to influence the other areas.

This model guarantees independence while maintaining the outlined standard of the whole assessment process at all stages.

A2 Diagram 2a: Summary approach to “On-Programme” and End Point Assessment, including interaction with mandatory qualifications

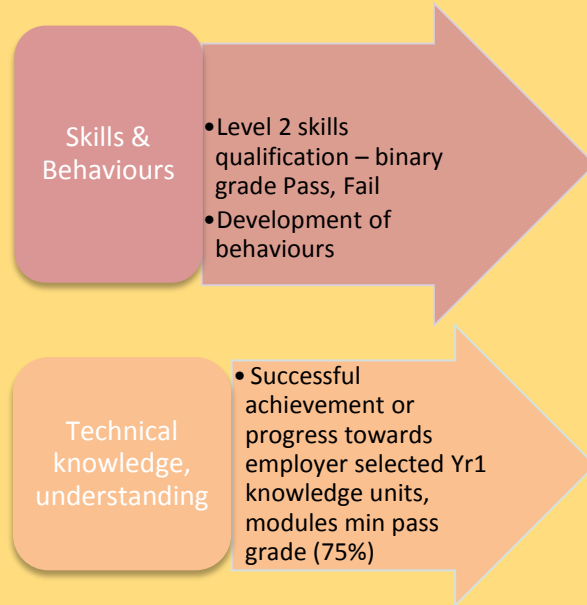
A2 Diagram 2b: Summary approach to “On-Programme” and End Point Assessment, including interaction with mandatory qualifications – EASA Licence Category A Pathway

Gateway 1

Gateway 2

Certificate

On Programme Assessment: Foundation Phase



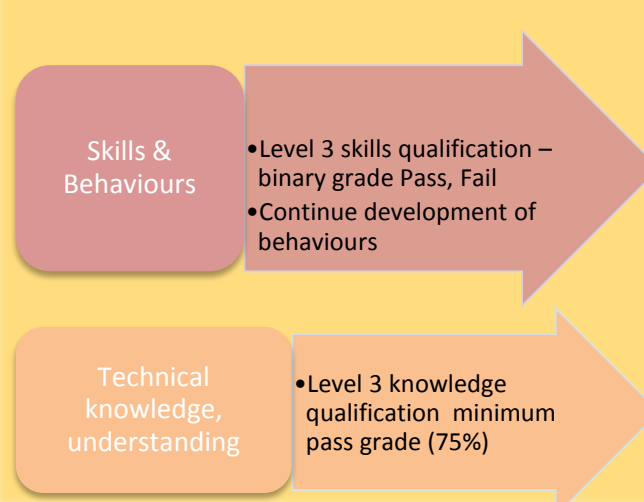
Mandatory Qualifications – in development

Level 2 Diploma in Aerospace and Aviation (Foundation Competence)

Gateway 1: Review & Assessment

The mandatory foundation competence qualification and satisfactory achievement/progress towards the employer selected Y1 Level 3 technical knowledge units /modules – min pass grade 75% must be achieved before progressing to the Development Phase. The training must take place in a protected but realistic work environment.

On Programme Assessment: Development Phase



Mandatory Qualifications – in development

- Level 3 Diploma in Aviation Maintenance (Development Competence) - Aviation Maintenance pathway **Plus one of the following**
- Level 3 Diploma in Aircraft Maintenance (Civil Aircraft Mechanical) approved by the CAA (min. 75% pass grade in all units)
- EASA Aircraft Maintenance Licence Category A Part 66 modules (min. 75% pass grade in all modules)

Gateway 2: Review & Assessment

In order to be ready for End Point Assessment the apprentice must have achieved:

- A binary grade Pass in the Competence Qualification
- A minimum 75% pass grade in all units/modules required for the Part 66 Technical Knowledge requirements for the EASA Aircraft Maintenance Licence - Category A
- Confirmation from the employer that the apprentice has met the requirements to apply for the EASA Aircraft Maintenance Licence - Category A
- The required Behaviours aligned to EngTech
- English and Maths qualifications required at Level 2

End Point Assessment

The **employer** undertakes a **Portfolio based Occupational Competence Validation Interview** (Viva, Annex 1)

A nominated **Professional Engineering Institution** undertakes an **independent assessment** to determine if the apprentice has met the Engineering Technician requirements as defined by the UK-SPEC. PEI validates apprentice achievement of mandatory qualifications/employer Viva.

(See Diagram 1b for full illustrated details of End Point Assessment)

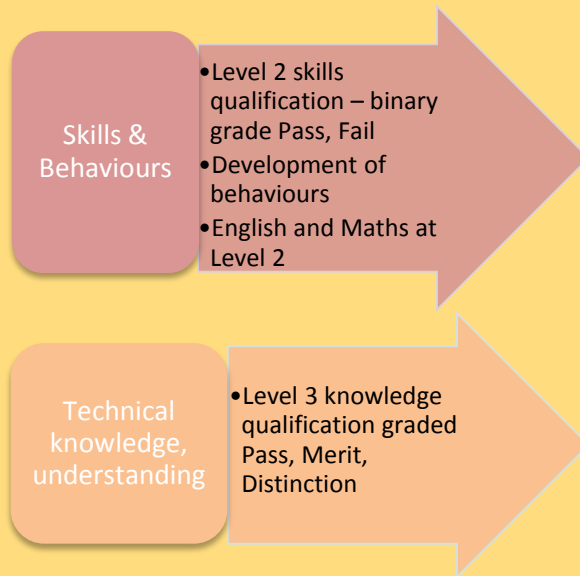
Apprentice Completion Certificate:

Final employer Sign Off & PEI applies for the Apprentice's completion certificate.

A2 Diagram 2c: Summary approach to “On-Programme” and End Point Assessment, including interaction with mandatory qualifications – Military Pathway

Gateway 1

On Programme Assessment: Foundation Phase



Skills & Behaviours

- Level 2 skills qualification – binary grade Pass, Fail
- Development of behaviours
- English and Maths at Level 2

Technical knowledge, understanding

- Level 3 knowledge qualification graded Pass, Merit, Distinction

Gateway 2

On Programme Assessment: Development Phase



Skills & Behaviours

- Level 3 skills qualification – binary grade Pass, Fail
- Continue development of behaviours

Technical knowledge, understanding

- Development and consolidation of Level 3 knowledge qualification

Gateway 2

End Point Assessment

The **employer** undertakes a **Portfolio based Occupational Competence Validation Interview** (Viva, Annex 1)

The Military Independent Assessment Authority (MIAA) undertakes an **independent assessment** to determine if the apprentice has met the specified Trade Military Professional Competence requirements. They also validate apprentice achievement of mandatory qualifications/employer Viva.

(See Diagram 1c for full illustrated details of End Point Assessment)

Certificate

Apprentice Completion Certificate:

Final employer Sign Off & MIAA applies for the Apprentice's completion certificate.

Mandatory Qualifications – in development

- Level 2 Aerospace and Aviation (Foundation Competence) **Plus one of the following**
- Level 3 Diploma in Aircraft Maintenance (Military Aircraft Mechanical)
- Level 3 Diploma in Aircraft Maintenance (Military Aircraft Electrical and Avionics)
- Level 3 Diploma in Aircraft Maintenance (Military Aircraft Weapons Maintenance)

Mandatory Qualifications – in development

- Level 3 Diploma in Aviation Maintenance (Development Competence)

Gateway 1: Review & Assessment

- Mandatory foundation qualifications must be achieved before progressing to Development Phase
- English and Maths at Level 2
- The training must take place in a protected, but realistic work environment.

Gateway 2: Review & Assessment

In order to be ready for End Point Assessment the apprentice must have achieved:

- A binary grade Pass in the Competence Qualification
- The required Behaviours aligned to Military Professional Competence

Section B: Detailed explanation of the end point assessment

B1 What skills, knowledge and behaviours are being assessed?

B1.1 Occupational Competence. Employers across the Aerospace and Aviation sectors have worked collaboratively to produce a suite of Employer Units of Competence (EUCs). Each EUC sets out in detail the skills, knowledge and behaviours that the apprentice must achieve in order to demonstrate that they are occupationally competent in the specific job role and employers tailored requirements including areas such as products, processes, procedures, tools, equipment, materials, documentation and information systems.

This will allow each organisation to develop their own specific and tailored apprentice assessment structure whilst at the same time ensuring that the overall outcome delivers depth, breadth and stretch to enable progression and/or transferability to other employers by meeting the skills, knowledge and behaviours as defined in the Standard. The EUCs will form part of the Employer Occupational Brief (EOB) and can be sourced from Annex 3.

B1.2 Professional Competence

(EngTech). Employers in partnership with relevant PEIs will also assess the apprentices' competence against the internationally recognised professional standard for an Engineering Technician (EngTech). Apprentices will be assessed against the following criteria:

- 1) Use engineering knowledge and understanding to apply technical and practical skills
- 2) Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services
- 3) Accept and exercise personal responsibility
- 4) Use effective communication and interpersonal skills
- 5) Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.

To support the end point assessment, Employers and PEIs have developed an Engineering Technician Performance Indicators Recording Form (Annex 2).

B1.3 Military Professional Competence (MPC). Employers in partnership with the Military Independent Assessment Authority (MIAA) will also assess the apprentices' competence against the Military professional standard for an Aircraft Maintenance Fitter/Technician. Apprentices will be assessed against the following criteria:

- 1) Use trade knowledge and understanding to apply technical and practical skills
- 2) Contribute to the maintenance, repair and overhaul of products, equipment, processes, systems or services
- 3) Accept and exercise personal responsibility

- 4) Use effective communication and interpersonal skills
- 5) Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.

To support the end point assessment, Employers, MIAA and the Training Requirements Authority (TRA) have developed a Military Professional Competence Standard Performance Indicators Recording Form (Annex 2). Note. All Military apprentices will meet the requirements for EngTech recognition should the apprentice wish to apply for membership.

B1.4 Continuous Professional Development (CPD)

Refers to the process of tracking and documenting the skills, knowledge and experience that an individual gains both formally and informally. It's a record of what they experience, learn and then apply. If the apprentice does decide to apply for registration with a relevant Professional Engineering institution at EngTech level, they must be committed to maintaining and enhancing their competence. They will be required to show evidence that they have taken steps to ensure this, and that they intend to continue to do this in line with the CPD Code for Registrants

What is it for?

The CPD process helps the individual manage their own development on an ongoing basis. It's function is to help them record, review and reflect on what they learn

The key features of the CPD process

- be a documented process
- be self-directed: driven by the individual and not the employer
- focus on learning from experience, reflective learning and review
- help individuals to set development goals and objectives
- include both formal and informal learning.

What are the benefits?

It can help individuals to reflect, review and document their learning and to develop and update their professional knowledge and skills. It is also very useful to:

- provides an overview of their professional development to date
- reminds them of their achievements and how far they have progressed
- directs their career and helps them keep their eye on their career goals
- uncovers gaps in their skills, knowledge and behaviours
- demonstrates their professional standing to employers and/or clients
- helps with their career development.

B2 How will the “what” be assessed?

Typically, this assessment takes place in the final months of the Apprenticeship, using the following methods:

- An Occupational Competence Validation Interview (Viva) drawing from a portfolio of evidence of occupational competence
- Professional competence assessment undertaken by independent assessor(s) (PEI or MIAA)
- Final employer endorsement of occupational and professional competence

B2.1 Portfolio of Evidence

Before the Occupational Competence Validation Interview (Viva) each apprentice will prepare and submit a supporting portfolio of evidence to the employer which will be assessed during the interview. This portfolio will enable the apprentice to demonstrate to the employer the specific work related tasks that they have completed in order to demonstrate how they have achieved both occupational and professional competence set out in the Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing) Standard and Employer Occupational Brief. The portfolio will also give the apprentice the opportunity to demonstrate to the employer that they understand the company in terms of their products, processes, procedures, tools, equipment, materials, documentation and information systems by showcasing what they have done, what they have learnt and how they have applied this knowledge and skills to real work tasks including solving aviation maintenance related problems.

The portfolio of evidence will show how the apprentice has demonstrated the knowledge, skills and behaviours required to be a competent Aircraft Maintenance Fitter/Technician (Fixed and Rotary Wing) and professional competence at EngTech / Military Professional Competence (MPC) Level.

The portfolio will include as a minimum:

B2.1.1 Occupational Competence

Three different examples of competent performance evidence that must include:

- Specific records of the aircraft maintenance undertaken by the apprentice including any quality/compliance and airworthiness records, reports or documents produced as part of the work activity

together with:

- Evidence of the way the apprentice carried out the activities to meet the requirements of Standard, such as assessor observations, supervisor/mentor references/ witness testimonies or authenticated apprentice reports of the activities undertaken.

Note: Apprentices undertaking the EASA Aircraft Maintenance Licence Category A pathway will need to ensure that the log book/portfolio of evidence will meet the requirements for the category A Licence application.

B2.1.2 Professional Competence – Engineering Technician (EngTech) / Military Professional Competence (MPC)

The apprentice's portfolio will also contain sufficient, valid and reliable evidence which is referenced to the **professional competence** requirements. This will be recorded in the appropriate professional competence Performance Indicators Recording Form (Annex 2) demonstrating where the apprentice has met the appropriate professional competence criteria:

Engineering Technician (EngTech)

- 1) Use engineering knowledge and understanding to apply technical and practical skills
- 2) Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services
- 3) Accept and exercise personal responsibility
- 4) Use effective communication and interpersonal skills (behaviours)
- 5) Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.

Military Professional Competence (MPC)

- 1) Use trade knowledge and understanding to apply technical and practical skills
- 2) Contribute to the maintenance, repair and overhaul of aircraft products, equipment, processes, systems or services
- 3) Accept and exercise personal responsibility
- 4) Use effective communication and interpersonal skills
- 5) Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.

Employer Assessors/mentors and/or their nominated Training Provider/Assessor should assist the apprentice in planning, creating and recording evidence to create the portfolio to ensure opportunities to obtain all the necessary competencies, skills and knowledge and behaviours are identified but it is the employer who determines whether the portfolio demonstrates the required standard for occupational competence, the portfolio will be submitted to the employer representative undertaking the Occupational Competence Validation Interview (Viva) (Annex 1).

If the review and assessment of the portfolio of evidence, in its entirety **does not** contain sufficient evidence to meet the standard then it will be deemed not yet ready to submit for Occupational Competence Validation Interview (Viva) (Annex 1). The apprentice will be advised about the shortfalls in evidence and how this can be addressed.

Note. All Military apprentices will meet the requirements for EngTech recognition should the apprentice wish to apply for membership.

B2.2 Occupational Competence Validation Interview (Viva)

The Occupational Competence Validation Interview (Annex 1) is an interactive interview focused on all the components of the Apprenticeship Standard, which will enable the employer to validate the apprentices' **occupational competence**. It is a structured and formal discussion between the apprentice and their employer, drawing upon a portfolio of evidence, and records of how the apprentice has performed during the Apprenticeship. It covers both what tasks the apprentice has completed in the workplace, the standard of their work, and the behaviours they have demonstrated throughout, such as, being a team player, having a positive attitude, a strong work ethic, being responsible employee, self-motivated and a proven commitment to the organisation. This enables the end point assessment to cover a broad range of knowledge and understanding, skills and behaviours, such as:

- the different methods and techniques used to maintain aircraft to ensure that airworthiness regulations are adhered to
- the organisation's quality/compliance processes and procedures and documentation
- the technical knowledge required to carry out aircraft maintenance processes/tasks safely and effectively
- being proactive in finding solutions to problems and identifying areas for improving the business.
- demonstrate effective interpersonal skills (behaviours)
- complying with statutory, regulatory, organisational and health and safety regulations while carrying out maintenance repair or overhaul techniques.

It will also be an opportunity for the employer to:

- clarify any points and/or probe the apprentice on the evidence they have presented in their portfolio
- confirm and validate that the portfolio of evidence is the apprentices own work
- confirm and validate the judgements about the quality of the work the apprentice has completed
- explore particular areas of work presented in the portfolio, how it was carried out, any problems that they encountered and how these were resolved.
- validate the apprentices skills and knowledge and understanding of the company in terms of their products, processes, procedures, tools, equipment, materials, documentation and information systems.

The Occupational Competence Validation Interview will also elicit the apprentice's depth and breadth of understanding of the **professional competence** requirements. This will be evidenced in the appropriate Professional Competence Performance Indicators Recording Form (Annex 2)

To ensure a consistency of approach, a guidance document on how to conduct a robust Occupational Competence Validation Interview (Viva) (Annex 1) will be published and available (Annex 7).

Note: Before the Occupational Competence Validation Interview (Viva) (Annex 1) can take place, the employer must have evidence that the apprentice has completed and will be awarded the mandatory vocational qualifications/certification requirements for this Standard - completed during the "On Programme" phase of the Apprenticeship i.e in this case: the Fitter/Technician or EASA Licence Category A pathway.

- Level 2 Aerospace and Aviation (Foundation Competence)
- Level 3 Diploma in Aviation Maintenance (Development Competence)
- Level 2 English
- Level 2 Maths

Plus one of the following Technical knowledge Qualifications as applicable to the pathway being undertaken

- Level 3 Diploma in Aircraft Maintenance (Civil Aircraft Mechanical) approved by the CAA
- Level 3 Diploma in On-Aircraft Maintenance Category A
- Level 3 Diploma in Aircraft Maintenance (Military Aircraft Mechanical)
- Level 3 Diploma in Aircraft Maintenance (Military Aircraft Electrical and Avionics)
- Level 3 Diploma in Aircraft Maintenance (Military Aircraft Weapons Maintenance)
- EASA Aircraft Maintenance Licence Category A, Part 66 modules through an approved Part 147 Training Organisation

Plus (Only applicable to the EASA Aircraft Maintenance Licence Category A pathway)

- Confirmation from the employer that the apprentice has met the requirements to apply for the EASA Aircraft Maintenance Licence - Category A

(NB: working titles for all qualifications currently in development will all be ready for delivery from September 2017) TBC by AOs

On completion of the Occupational Competence Validation Interview (Viva) (Annex 1) the apprentice will be awarded a grade of Pass or Fail. i.e. Competent or not yet Competent.

Independent Assessment of Professional Competence (EngTech/MPC) and Employer Viva Verification

On successful completion of the Occupational Competence Validation Interview (Viva) (Annex 1) i.e. achieving a pass grade, the completed Professional Competence Performance Indicators Form (Annex 2) and any supporting evidence will be sent to the employer designated Independent Assessment Body i.e a relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) to assess the apprentice's readiness for professional competence

On completion of the professional competence assessment and Viva verification, the designated Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) will notify the employer and/or their nominated training provider if the apprentice has been successful or

not. If not, the apprentice will be advised of the shortfall in evidence and given advice and guidance on the type and level of evidence that will be required to meet the required professional competence standard.

Final Sign Off – Employer Endorsement & Application for Apprenticeship Completion Certificate

If successful, i.e. the employer has received confirmation the selected Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) stating that the apprentice has met the professional competence criteria, the employer will undertake the Final Sign Off of the Apprenticeship by signing the last section on the Occupational Competence Validation Interview (Viva) (Annex 1) document along with the apprentice. The relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) on the Register of Apprentice Assessment Organisations then applies for the apprenticeship completion certificate.

B3 Who will do the assessment?

The end point assessment will be undertaken by a range of parties depending upon the nature of what is being assessed. For final judgements to be made the following is required:

- 1) The employer will have final judgement on the Occupational Competence of the apprentice. **Note:** Prior to the end point assessment the employer will already have received confirmation from the relevant Awarding Organisation(s) that the required mandatory vocational qualifications have been achieved and/or where applicable received confirmation that that the apprentice has achieved a) the EASA Aircraft Maintenance Category A Part 66 requirements achieving a 75% pass grade in all relevant units/modules and b) the EASA Aircraft Maintenance Licence Category A requirements as part of the “on-programme” assessment. This will be recorded on the Occupational Competence Validation Interview (Viva) Annex 1.
- 2) The Independent Assessor(s) from the relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) will have final judgement on the Professional Competence of the apprentice by reviewing, assessing and verifying the evidence and any supporting documentation contained in the following:
 - Occupational Competence Validation Interview (Viva) (Annex 1)
 - Relevant Professional Competence Performance Indicators Recording Form (Annex 2)

B3.1 The Employer

- The employer will conduct the Occupational Competence Validation Interview (Viva) (Annex 1) to judge Occupational Competence. The employer is best placed to determine whether an apprentice has the required knowledge, skills and behaviours to fulfil the designated role, a support guide will be produced and available to assist the employer during the interview (Annex 7). The employer will have understanding and expertise in the area in which the apprentice works and will know what questions to ask the apprentice in order to ascertain their level of competency. This will be particularly important due to the health and safety critical nature of the sector. During this Viva the apprentice will need to demonstrate competence of the appropriate knowledge, skills and behaviours to the employer, drawing from real work based tasks

accomplished, presenting not only what they have done, but how they have done it and why. The apprentice's use of a Portfolio of Evidence is important here so that the employer can see tangible evidence. (Occupational Competence Validation Interview (Viva) (Annex 1).

- The employer will also review the relevant Professional Competence Performance Indicators Recording Form (Annex 2) in preparation for submission to the relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) for a final independent judgement to be made.
- For the avoidance of doubt the Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) has the overall say on Professional Competence, the apprentice completion certificate cannot be issued without it.

B3.2 Independent Assessor(s) from the relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA)

- Independent assessor(s) will validate the initial judgement made by the employer recorded on the appropriate Professional Competence Performance Indicators Recording Form (Annex 2). In terms of making their final independent judgement of Professional Competence this will be based on EngTech requirements as defined in the Engineering Council's UKSPEC or the MPC Requirements as defined by the relevant TRA. The independent assessor(s) must be affiliated to the relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) with which the employer initially confirmed to undertake end point assessment.
- Independent assessor(s) from the Professional Engineering Institution(PEI) or Military Independent Assessment Authority (MIAA) will also examine the Viva documentation, signed by the employer and used as evidence to judge Occupational Competence, this enabling a validation of the Viva process and documentation. However, it is the employer who will make the final judgement of an apprentice's Occupational Competence.
- The Professional Engineering Institution (PEI) and Military Independent Assessment Authority (MIAA) will be the bodies that are on the Register of Apprentice Assessment Organisations.

B3.3 Final Sign Off – Employer Endorsement & Application for Apprenticeship Completion Certificate

If successful, **the employer** will undertake the Final Sign Off / Employer Endorsement stage of the Apprenticeship by:

- accepting the assessment of the Professional Engineering Institution (PEI) and Military Independent Assessment Authority (MIAA)
- signing the by signing the last section on the Occupational Competence Validation Interview (Viva) (Annex 1) document along with the apprentice
- The relevant Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) on the Register of Apprentice Assessment Organisations then applies for the apprenticeship completion certificate.

B4 How will assessments be quality assured?

B4.1 Internal Quality Assurance

B4.1a) Internal QA - Occupational Competence – Viva (employer)

- The employer should hold moderation meetings at appropriate intervals in line with their apprentice recruitment timelines and cohort numbers to review the quality of the viva process and make sure that consistent and reliable judgement on occupational competence is made within the organisation. For SMEs, if necessary, the expectation should be to collaborate with other employers to ensure consistency (See Employer Occupational Brief Annex 3 for further guidance).

B4.1b) Internal QA – Relevant Professional Competence – EngTech (PEI) and Military Professional Competence (MIAA)

- The Professional Engineering Institutions (PEIs) practice on-going moderation of EngTech registration applications. In the first instance all applications are reviewed by a minimum of 2 trained assessors against the Engineering Council UKSPEC requirements, who make a recommendation to the broader committee who also review the information and consider the recommendation. Thus all applications are benchmarked against the wider standard and the performance of assessors is continuously monitored. In addition, all PEIs are required by the Engineering Council to conduct internal audit reviews of the process, on a sampling basis.
- All those involved in the assessment process, at every stage, are required to undertake initial and on-going training. This includes updating on UK-SPEC requirements, good practice in assessing, process and quality issues raised by assessors.
- As the licencing body for the professional engineering institutions, the UK Engineering Council sets and upholds the standards for professional registration against which all assessments are made in all PEIs – UK-SPEC. The Engineering Council undertakes regular monitoring of the PEIs, including a full audit every 5 years, with an interim review audit in between.

Internal QA - Military

- The Military Aviation Authority (MAA) provides regulatory oversight of all aspects of service military aviation, including the training of personnel. The regulations and procedures followed by the Training Requirements Authority (TRA) are governed and audited by the MAA by means of a system of audits laid out in the regulatory articles.
- Internal quality assurance of the assessment standards, processes and decisions of both the knowledge component and the competence components, and the procedures and processes involved in the administration is provided by regular IQ audits carried out by the respective service Apprenticeship Management Team.
- The relevant Military Independent Assessment Authority provides QA for the End Point Assessment process, by validating apprentice achievement of mandatory qualifications and employer Viva.

B4.2 External Quality Assurance

We are investigating options for External Quality Assurance with the Engineering Council and the Assessment Plan will be updated once those arrangements are confirmed.

SECTION C – Grading

C1 How will grading be applied?

The following grading will apply for the End Point Assessment:

- For the Occupational Competence Validation Interview (viva) (Annex 1) this will be a binary pass /fail grade
- For the Professional Competence this will be Pass/ Fail i.e. a pass will mean they have met the requirements for EngTech. Therefore should they wish to apply for professional registration they are deemed as EngTech ready.

Due to the complex and safety critical nature of the industry a grading exemption note has been granted (Annex 8).

SECTION D - Implementation

D1 Affordability

The costs allocated to end point assessment equates to no more than 3% of the overall costing for the delivery and assessment requirements for the Apprenticeship. The cost for end point assessment includes the following

- Occupational Competence Validation Portfolio Collation
- Occupational Competence Validation Interview (Viva)
- Professional Engineering Institution (PEI) and Military Professional Competence (MIAA) assessment and validation costs. Both are a not for profit organisations and therefore the fee incurred for undertaking the End Point Independent Assessment is for cost recovery purposes only
- Employer "Final sign off"
- Apprenticeship Certificate

D2 Capacity planning for End Point Independent Assessment volumes

Employers and the relevant Professional Engineering Institutions (PEIs)/Military Independent Assessment Authority (MIAA) have conducted a feasibility analysis to ensure that there will be sufficient capacity within the selected PEI/MIAA to meet the number of apprentices requiring End Point Independent Assessment including when, during the calendar year that the assessment is likely to be required. We are planning to start with low volumes in order to test the process and this will allow us to fully understand the challenge and plan accordingly to meet future needs.

Annexes (NB Link to be created to each of these documents in the interim contact Customer.Services@semta.org.uk)

Annex 1 [Occupational Competence Validation Interview \(Viva\)](#)

Annex 2 [Engineering Technician \(EngTech\) and Military Professional Competence Performance Indicators Recording Forms](#)

Annex 3 [Employer Occupational Brief \(EOB\)](#)

Note: In order to articulate the specific level of skills, knowledge and behaviours required to be achieved and assessed to demonstrate full occupational competence in the foundation and development phase of the Apprenticeship. The employers on the Trailblazer group have developed a more detailed Employer Occupational Brief (EOB).

The brief will inform the awarding organisations of the required elements of both knowledge and vocational skills within this Apprenticeship Standard. It will also provide a clear basis for the development of the assessment of this Apprenticeship and will enable the sector to maintain world class levels of quality and ensure that the credibility and consistency of Apprenticeship outcome is maintained. The Employer Occupation Brief is an all-embracing term being used by employers and will contain a number of separate documents.

Employer Occupational Brief
Foundation Phase - Employer Units of Competence
Foundation Phase - Qualification Structure(s)
Development Phase - Employer Units of Competence
Development Phase - Qualification Structure(s)
Qualification Assessment Strategy for Foundation & Development Phase
EASA Aircraft Maintenance Licence Category A Part 66 module titles
Employer Approved Awarding Organisation Qualifications Document

Annex 4 - [The journey to End Point Assessment](#)

Annex 5 - [Letters of Endorsement](#)

Annex 6 - [Occupational Architecture](#)

Annex 7 - [Employer's Guide and Illustrative Flow to End Point Assessment](#)

Annex 8 - [Grading Exemption Note](#)