

# **End Point Assessment Plan**

## **Aviation Maintenance Mechanic (Military) Standard**

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**Note.** Apart from Annex 4, and 5 the other Annexes are currently in development. Once complete this Assessment Plan will be re issued along with supporting Annexes including URL links and made available to all relevant apprentices and stakeholders. For interim information, advice and guidance relating to the documentation in development and access to Annex 5 please contact [Customer.Services@semta.org.uk](mailto:Customer.Services@semta.org.uk) quoting Trailblazer Assessment Plan documentation.

## Foreword

*The Aviation Maintenance Mechanic (Military) 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:*

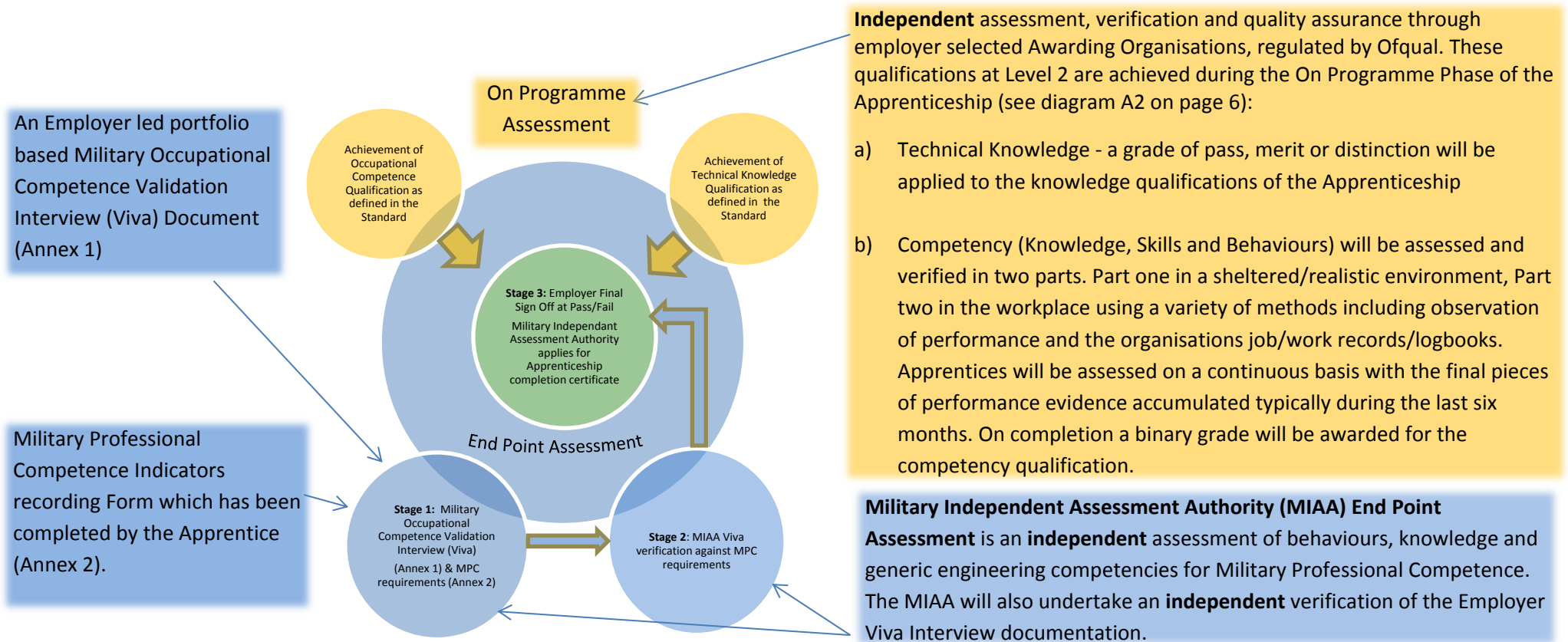
- 1) *We have introduced a formal gate review at the conclusion of the foundation stage. Apprentices will not progress beyond this without successful completion of this stage.*
- 2) *We have introduced a viva and formal overall assessment of competence as part of the end point assessment for the Aviation Sector. They will need to demonstrate skills, knowledge and behaviours developed across the Apprenticeship.*
- 3) *We have introduced an alignment of competence to the trade specific Military Professional Competence requirements*
- 4) *We have utilised qualifications within the apprenticeship framework to ensure those personnel who are unable to complete the length of service required to complete the apprenticeship, for whatever reason, has a recorded transferrable qualification that is of wider use to UK PLC.*
- 5) *We are also taking a radically different approach with Awarding Organisations to develop new Trailblazer qualifications, including a consistent approach to grading and assessment.*
- 6) *These new arrangements help provide greater transferability for Military personnel to the civilian sector at the end of their service.*

*Due to the safety critical and complex nature of Aviation Maintenance Mechanic training much of the assessment needs to be carried out 'on a continuous basis' to ensure that the skills, knowledge and behaviours that relate to the organisation's 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 the apprentice, the end user and to the organisation 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.*

***(Aviation MRO sector Trailblazer Group, June 2016).***

## Section A: Summary of End Point Assessment

A1 Diagram 1: End Point Assessment for an Aviation Maintenance Mechanic (Military)

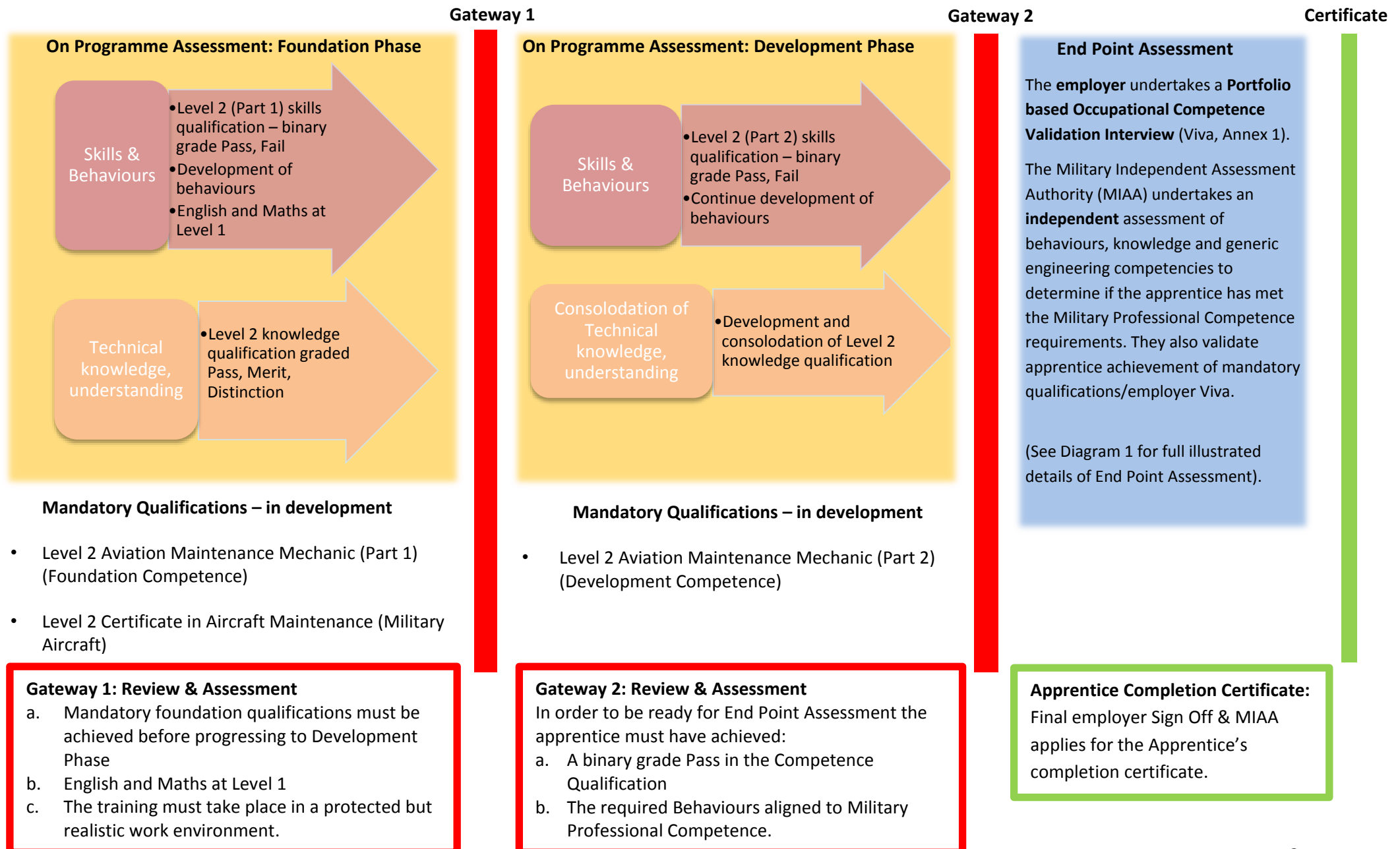


**The Military Independent Assessment Authority (MIAA)** will apply for the apprenticeship completion certificate only when the on programme competency and knowledge qualifications are completed, it has verified the Viva Interview document signed by the employer (Stages 1 and 2) and will also have received 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 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 2: Summary approach to “On-Programme” and End Point Assessment, including interaction with mandatory qualifications

## 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. The EUCs will form part of the Employer Occupational Brief (EOB) and can be sourced from Annex 3.

**B1.2 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 Aviation Maintenance Mechanic (Military). 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 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.

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). This will form part of the Employer Occupational Brief (EOB) and can be sourced from Annex 3.

## B2 How will the “what” be assessed?

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

- Occupational Competence Validation Interview (Viva) drawing from a portfolio of evidence of occupational competence
- Professional competence assessment undertaken by an independent assessor (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.

This portfolio of evidence will show how the apprentice has demonstrated the knowledge, skills and behaviours required to be a competent Aviation Maintenance Mechanic and the professional competence required by the Training Requirements Authority (TRA). 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.



### B2.1.2 Military Professional Competence (MPC)

The apprentice's portfolio will also contain sufficient, valid and reliable evidence which is referenced to the **military professional competence** requirements of the relevant TRA. The portfolio will contain evidence where the apprentice has met the following criteria:

- 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 (behaviours)
- 5) Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.

The compiled portfolio of evidence will be reviewed internally by the Employer and Assessors to ensure it meets the required standard for occupational and professional competence. When agreed it does, the portfolio will be submitted to the employer undertaking the Occupational Competence Validation Interview (Viva) (Annex 1).

### 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
- demonstrate effective interpersonal skills (behaviours)
- complying with statutory, regulatory, organisational and health and safety regulations while carrying out maintenance activities.

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 knowledge and understanding of the organisation 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 for an Aviation Maintenance Mechanic required for **Military Professional Competence**. These will be evidenced in the apprentice's Military Professional Competence Standard Performance Indicators Recording Form (Annex 2).

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.

### **Military Independent Assessment Authority (MIAA) Independent Assessment and Viva Verification**

On successful completion of the Occupational Competence Validation Interview (Viva) (Annex 1) i.e. achieving a pass grade, the completed Military Professional Competence Standard Performance Indicators Recording Form (Annex 2) and any supporting evidence will be sent to the designated Military Independent Assessment Authority (MIAA) to assess the apprentice meets the Military Professional Competence Standard.

On completion of the assessment and Viva verification the Military Independent Assessment Authority 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 standard.

### **Final Sign-Off – Employer Endorsement**

When the employer is in receipt of the notification stating that the apprentice has met the MPC requirements, the employer will undertake the Final Sign Off / Employer Endorsement stage of the Apprenticeship by:

- signing the Occupational Competence Validation Interview (Viva) (Annex 1) document along with the apprentice and the employer
- authorising the MIAA to apply to the designated body for the Apprenticeship completion certificate.

### B3) Who will do the assessment?

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, as part of the “on-programme” assessment. This will be recorded on the Occupational Competence Validation Interview (Viva) form Annex 1.
- 2) The independent Assessor(s) from the 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)
  - Military Professional Competence Standard Performance Indicators Recording Form (Annex 2).

#### B3.1 The Employer

##### 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. 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 Military Professional Competence Standard Performance Indicators Recording Form (Annex 2) in preparation for submission to the MIAA for a final independent judgement to be made.

### B3.2 Independent Assessor(s) from the Military Independent Assessment Authority (MIAA)

- The Independent assessor will validate the initial judgement made by the employer recorded on the Military Professional Competence Standard Performance Indicators Recording Form (Annex 2). In terms of making their final independent judgement of Military Professional Competence, this will be based on the MPC Requirements as defined by the relevant TRA, which will then be signed off.
- The Independent assessor 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 MIAA will be the body that is on the Register of Apprentice Assessment Organisations.

### B3.3 Final Sign Off – Employer Endorsement

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

- accepting the assessment of the Military Independent Assessment Authority (MIAA)
- by signing the last section on the Occupational Competence Validation Interview (Viva) (Annex 1) document along with the apprentice
- The Military Independent Assessment Authority (MIAA) then applies for the apprenticeship completion certificate.

## B4 How will assessments be quality assured?

### B4.1 Internal Quality Assurance

- 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. (See Employer Occupational Brief Annex 3 for further guidance).
- 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 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 (EQA)**

We are considering employer led approaches for quality assurance and governance, and are working through the options with DfE

## **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 Military Professional Competence.

Due to the complex and safety critical nature of the industry a grading exemption note has been granted (Annex 5).

## **SECTION D – Implementation**

### **D1 Affordability**

The costs allocated to end point assessment equates to approximately 2.5% 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)
- Military Independent Assessment Authority (MIAA) costs for professional competence assessment
- Employer "Final sign off"
- Apprenticeship Certificate.

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

**Annex 1** [Occupational Competence Validation Interview \(Viva\) <Insert URL>](#)

**Annex 2** [Military Professional Competence Standard Performance Indicators Recording Form](#)

**Annex 3** [Employer Occupational Brief <Insert URL>](#)

The Employer Occupational Brief is an all-embracing term being used by employers and will contain a number of separate documents.

<b>Employer Occupational Brief</b>
Foundation Phase - Employer Units of Competence
Foundation Phase - Qualification Structure
Development Phase - Employer Units of Competence
Development Phase – Occupational Competence Qualification Structure
Qualification Assessment Strategy for Foundation & Development Phase
Employer Approved Awarding Organisation Qualifications Document

**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.

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

Annex 5 – [Grading Exemption Note](#)