Independent Review & Assessment

Aerospace Fitter Standard

The Aerospace Manufacturing Fitter Apprenticeship Standard- Independent Review and Assessment is delivered within the three phases of the apprenticeship standard, these being the:

- Foundation Phase
- Development Phase
- Employer Endorsement Phase

Taken together the assessment approach we detail here is <u>fundamentally different</u> and represents a <u>significant improvement</u> on what we currently do, namely:

- 1) We have introduced a formal <u>gate review</u> at the conclusion of the foundation stage at end of year one. Apprentices will not progress beyond this without successful mastery of this stage.
- 2) We have introduced a <u>viva and formal overall assessment of competence</u> as part of the employer endorsement phase by employers <u>against a common industry wide framework.</u> They will need to demonstrate a full mastery of all skills & knowledge across the apprenticeship.
- 3) We have introduced an alignment <u>of competence to EngTech status</u> the recognised professional industry Standard. This is totally new and is backed by all the relevant Professional Engineering Institutions (PEIs). This also <u>looks forward as well as back</u> and provides an opportunity to record future development activity linked to professional development.
- 4) We are taking a <u>radically different approach</u> with <u>Awarding Organisations</u>. We are requiring them to <u>work together for the first time</u> and to take a <u>consistent approach to grading and assessment for the first time</u>. This will ensure that whatever the size of employer, the Awarding Organisation or part of the country in England the industry (and apprentice learners) will have the confidence that grading and the overall approach to assessment is the same.

On this basis the Trailblazer Group (employers big & small, Professional Institutions and Awarding Organisations) argue that this is <u>radical</u> and certainly <u>more robust than existing arrangements</u> and <u>designed to ensure greater consistency of approach</u> and of the Standard across the sector.

Based on best practice, and many years of experience that meet business process requirements, the aerospace sector requires continuous assessment on a mandatory basis, to ensure the competence of our employees who are engaged in real work and on real products and therefore need to be judged to be competent and safe to work. The model that we have to apply necessitates a process of assessment, training and then further assessment, and this ensures both objectivity and consistency.

This approach has been <u>designed</u>, <u>tested</u> and <u>approved</u> with <u>direct engagement among SMEs</u> that make up 96% of the engineering manufacturing sector and meets their requirements.

The <u>assessment</u> is carried out by the <u>Awarding Organisations</u> in line with the regulatory requirements set out by Ofqual, the <u>Professional Institutions</u> against the Engineering Council (UKSPEC) Engineering Technician status and is finally <u>signed off by the receiving employer.</u>

The <u>core and options</u> approach makes the Standard accessible and appropriate for all sizes of business which is specified in the key requirements. The mandatory elements have been carefully chosen to enable the most appropriate transferrable skills and knowledge for our industry sector, within this occupation. This approach has been agreed with other employers across the wider Advanced Manufacturing & Engineering sector.

The <u>principle of a successful apprentice is one who is deemed competent by their employer</u>, in line with the published Standard and the Employer Occupational Brief, and our approach does this in a rigorous and robust manner. Performance is something which employees will be measured upon within their permanent roles and dependent upon individual business drivers. There will be a Certificate of Apprenticeship which clearly outlines the individual's achievements.

The original agreed <u>assessment table</u> showed a total of 25% of the Apprenticeship as graded pass, merit or distinction. The rationale behind this is based on an understanding of the relative weight of learning over the whole Apprenticeship. There is a binary grade which applies to the work-based competence components.

Aerospace Trailblazer – Aerospace Fitter – Assessment Summary

Foundation Skills (20%) – New vocational skills qualification at Level 2 designed for employers.

Foundation Knowledge (10%) – New technical knowledge qualification designed for employers.

(5%) – Incorporated into the skills and knowledge qualifications.

End of
Foundation
Phase
Gateway

Gateway
Apprentice
must
complete all
three
elements of
the
foundation
phase to
progress on to
the
development
phase.

Development Skills (30%)

New vocational skills qualification at Level 3 designed for employers.

Development Knowledge

(15%) – New technical knowledge qualification, graded at Pass, Merit, and Distinction.

Development Behaviours

(10%) – Linked directly to the requirements of Eng Tech registration.

Employer endorsement

Brings
together all
evidence to
date.
Synoptic
viva
interview.
Completion
of Eng Tech
reporting
form.

Professional Body Assessment

Independent
assessment of
evidence by Prof
Body.
Apprentice
cannot complete
until they have
confirmed Eng
Tech met

1. Range of methods	As set out above, incorporates practical test, employer approved project work, viva based interview, written and multiple choice tests.	6. Grading	Knowledge will be graded pass, merit, distinction and this will appear on the Apprenticeship certificate.
2. Independence	Qualifications within the standard independently developed by awarding organisations. Professional body independently assesses all apprentices at end.	7. Affordability	This model is affordable within the funding model being trialled for 2014/15 for Trailblazers. Employers negotiated a cost of £40 for Eng Tech assessment.
3. Consistency	Employers have charged three awarding organisations to work together on a single set of tools to ensure consistency.	8. Manageability	The Trailblazer group are working with three assessment organisations and three professional bodies to ensure sufficient capacity.
4. Validity	Assessment methodologies chosen by experienced companies to test full competence and run by recognised awarding organisations.	9. Professional body recognition	This has been developed in partnership with and signed off by the relevant Professional Engineering Institutions.
5. Synoptic	Assessments at the end of both the foundation and development phases look back across the full range of skills and knowledge. Professional bodies take a synoptic view to ensure fully rounded professionals	10. Assessment largely at the end	Whilst there will be ongoing assessment during the Apprenticeship, the majority (65%) of formal assessment will be in the development phase, culminating in the employer endorsement.

For us the <u>independence</u> of assessment is provided by the Engineering Institutions. They will independently validate and sign off competence against Eng Tech status based on a <u>portfolio of evidence</u> that will have be collected by the apprentice over their apprenticeship. And for us the <u>synoptic assessment</u> is both what we as employers do ourselves to formally sign off competence, but there is a parallel and independent validation by the engineering institution that the apprentice has met this Standard. This is a <u>"belt and braces"</u> approach that we have not done before.

Employers in the Aerospace Sector have produced 'Employer Units of Competence' (EUC's) for the Foundation and Development Phases of the Apprenticeship that set out the skills, technical knowledge, behaviours and understanding needed in employment (that) clearly define the role of Mechanical Fitter (Manufacturing) in the Aerospace Sector.

Employers in the Aerospace Sector have produced an **Employer Occupational Brief**: Occupational Competence and Technical Knowledge Qualification Assessment Strategy (see attached) which:

- Supports this assessment plan and contains the detailed assessment requirements
- supports the implementation and delivery of the Apprenticeship Standard
- provides clarity for Awarding Organisations on what constitutes competent performance
- encourages and promotes consistent assessment of the Employer Units of Competence
- promotes cost effective delivery and assessment plans for both competence and technical knowledge qualifications

This includes

- the qualifications and experience required for Teachers; College Lecturers; Assessors and Verifiers
- the assessment environment and notes on replicating the working environment.
- access to assessment and requirements relating to:
- carrying out assessments both internal and external
- performance evidence
- · assessing technical knowledge, behaviors and understanding
- · quality control of assessment

The full document is attached to this assessment submission and has been supplied to the relevant Awarding Organisations for the development and operation of both competence and technical knowledge qualifications for use in both the Foundation and Development stages of the standard.

Foundation Phase

The Foundation phase: (A significant period of off-the-job training at level 2 covering three key aspects of training, basic engineering skills, relevant underpinning knowledge and behavioural development.) The basic engineering skills include core or 'mandatory' requirements, together with a range of tailored engineering skills units required to meet the specific needs of individual

employers. Academic study will underpin skills development and will form the preparation for achievement of the main academic component. During this time apprentices will develop the appropriate behaviours to support their learning. This phase will culminate in an end test to ensure a strong foundation of basic skills has been developed.

The Assessment of achievement is based on the achievement of 3 elements:

The assessment is undertaken at the end of the first year of training and all elements <u>must</u> <u>be achieved</u> for the apprentice to advance onto the development phase of the apprenticeship.

- Foundation Vocational skills: A brand new vocational skills qualification at level 2 is being configured to cover the core basic skills identified in the Aerospace Manufacturing Fitter Standard. This has been developed by groups of employers both those on the TB group and SMEs brought together by GTA England and NFEC. This is to ensure that it is suitable for SME delivery. It will have a core and options configuration to cover the basic skills identified and allows for the variation in the delivery context. It will be delivered off-the-job in controlled circumstances. Foundation Vocational skills weighted at 20% and achievement is graded competent or not competent, i.e. where grading (PMD) does not technically apply
- **Technical Knowledge:** Again we are developing a new technical knowledge qualification at level 2 which fully underpins the core skills and knowledge requirements identified in the Standard. Technical Knowledge weighted at 10% achievement being graded Pass, Merit or Distinction
- Behaviours: The behaviours have incorporated into both the skills and underpinning knowledge qualifications and are weighted at 5% and achievement is graded competent or not competent.

Assessment is undertaken at the end of the first year of training and all elements must be achieved (gateway process) for the apprentice to progress onto the development phase

Development Phase: (Further Vocational and Academic Learning) will build on the basic skills and knowledge from the Foundation phase and focus on developing further on-the-job skills capability and will consist of a two year programme. The Assessment of achievement is based on 3 elements:

• **Development phase Vocational Skills:** A brand new vocational skills qualification at level 3 is being configured to cover the further skills capability identified at level 3 in the Aerospace Manufacturing Fitter Standard. Again we have involved a wide

- range of employers, particularly small employers in the design and specification process, and have taken advice with regard to assessment practice. Vocational skills weighted at 30% where achievement is either competent or not competent i.e. where grading(PMD) does not technically apply
- **Development phase Technical Knowledge:** A new complimentary level 3 technical knowledge qualification that underpins the vocational skills requirements identified above and articulated in the standard. Technical Knowledge weighted at 15% achievement being graded Pass, Merit or Distinction
- **Behaviours** weighted at 10% and achievement is graded competent or not competent and are linked to the requirements of the Engineering Technician U.K Spec produced by the Engineering Council

Final technical knowledge grading will be based on the level 3 requirement, notwithstanding the fact that to progress to the development phase of training at least a pass will be required.

Employer Endorsement Phase is split into three parts:

• Apprentice End of Scheme Assessment and Employer Sign Off' involves the apprentice; Awarding Organisation (through certifying the programme); training provider; company training manager and receiving employer. This is a viva based interview focused around the review of all the components of the Foundation and Development training phases of the apprenticeship standard recorded on their end of scheme assessment document. The review will also elicit the apprentice's depth and breadth of understanding of the Engineering Technician criteria and how well these have been reflected in the apprentice's Engineering Technicians Performance Indicators form completed by the apprentice while in the development phase of training. During the viva, evidence of completion of these components will be discussed in depth. This will provide opportunity for employers to probe in particular for any gaps or weaknesses. A supporting brief will be produced to support the viva interview with guidance on questions and as part of this it will request that employers discuss with their apprentices a real work-based scenario to test their full understanding. The apprentice and receiving employer will identify in the Personal Development Plan section at the back of the document what areas of further development beyond meeting the apprenticeship standard that should take place during the 1st substantive appointment and articulate the apprentice's on-going aspirations for personal development. This will be particularly useful for the Eng Tech UK SPEC independent assessment. If the apprentice has completed the required components of the standard and the Engineering Technicians Performance Indicators Recording Form has been satisfactorily completed and all the criteria met and there are no contrary indications, the receiving employer will sign the apprentice off and

accept them as meeting the needs of the business. Furthermore they will recommend that the apprentice goes forward for the Eng Tech review. <u>Full advice and guidance</u> will be given to the training provider and training manager to ensure the viva is conducted in a <u>consistent and standardised manner</u>. A <u>communications plan</u> will be prepared to ensure that appropriate and timely advice and guidance is rolled out.

- Engineering Technician Performance Indicators Recording Form must be completed by the apprentice during the development phase of their training to record it should record:
 - Evidence of their contribution to either design; development; manufacture; commissioning; decommissioning; operation, or maintenance of products equipment, processes or services
 - Supervisory or technical responsibility
 - Effective interpersonal skills in communicating technical matters
 - Commitment to professional engineering values

At the commencement of the development phase of training each apprentice will be given appropriate training and guidance about the UK Engineering Councils UK Eng Tech process, and how the recording form should be used to record appropriate evidence. Additionally the training provider and training manager should regularly review the apprentice's progress on completing the form, ideally this should form part of the apprentice's quarterly review process.

• Independent Assessment of the Apprentice against the Engineering Councils UK SPEC Engineering Technician Criteria carried out by an employer nominated Professional Engineering Institution (PEI). During the Development phase of training the apprentice will complete the Engineering Technician Performance Indicators Recording Form. The design format of the form requires the apprentice to clearly articulate what competence, knowledge, commitment and behaviours they have applied in every day working conditions to meet each of the Engineering Technician criteria as stated This together with the Apprentice End of Scheme Assessment confirming that all the components of the standard have been met will be forwarded to the relevant Institution to help them determine if the apprentice has met the Engineering Council's Engineering Technician criteria and the apprenticeship standard. The assessors will be looking for evidence that the apprentice knows how to do the job and was able to go beyond the immediate requirements, using their initiative and experience to solve a problem or

improve a process. Apprentices cannot complete the standard until they have met the Eng Tech criteria and have been signed off by the relevant Institution.

Criteria for the Assessment Plan

Criterion	Detail	Suggested evidence
1. Using a range of assessment methods	Your assessments must cover the whole standard and will therefore need to test both skills and knowledge elements (and behaviours where specified and subject to formal assessment). This will require mixed methods of assessment, which may include for example: • Practical assessments. • A viva to assess theoretical or technical knowledge or to discuss how the apprentice approached the practical assessment and their reasoning; • Production of a project. • A portfolio of work. • Observational assessment. • Written and multiple choice tests;	Our assessments of the Standard cover the following types of assessment: • Practical assessment of NQF Competence and technical knowledge qualifications designed to meet the Foundation and Development stages (see page 8 of the Employer Occupational Brief: Occupational Competence and Technical Knowledge Qualification Assessment Strategy attached) • A viva based meeting in the form of the Apprentice End of Scheme Assessment and Employer Sign Off (see details for Employer Endorsement Phase above) • Employer approved project work undertaken both in the Foundation and Development stages of the standard as required – these projects tend to be synoptic in nature, solving practical problems identified by the employer • Development of a portfolio of evidence will be a key part of the NQF Level 2&3 assessment requirements • Observational assessment will be a key part of the NQF Level 2&3 competence qualifications

	Virtual assessments, such as online tests or video evidence as appropriate to the content.	Written and multiple choice tests will, alongside other assessment methods, be used to assess knowledge as part of the Technical Knowledge Qualifications - the precise methods are to be agreed across Awarding Organisations (see page 10 and 11 of the Employer Occupational Brief: Occupational Competence and Technical Knowledge Qualification Assessment Strategy - attached)
		Virtual assessments, including the provision for on- line tests, and innovative approaches to recording evidence using video evidence, will be adopted where feasible as part of both Foundation and Development stage assessments (specific details to be determined)
		 We allow significant simulation in the foundation phase of training which is completed off-the-job. Group Training Associations and Colleges have traditionally helped small companies, as have large companies through the supply chain to access the breadth of skills required, especially in the development phase of training. This has worked for many years and SMEs and training providers are currently operating this way with no ill effects
2. Ensuring Independence	It is vital that all apprentices are assessed in a fair and objective manner. Independence is critical to ensure quality assessment and to The assessment plan must include a description of how you intend to ensure the standard is maintained over time. There is an expectation that assessments will be delivered	Assessment requirements for the foundation and development phases of the standard are contained within Section 1 &2 of the Employer Occupational Brief: Occupational Competence and Technical Knowledge Qualification Assessment Strategy (see attached). These requirements must be followed meticulously.

by an independent third party, (i.e. assessors who have nothing to gain or lose as a result of the assessment judgements they make)

Independence of assessment. This could include:

- Using an independent third party assessment body to run all the assessments for the standard.
- External moderation of assessment, by assessment experts or other employers.
- Panel assessment involving an independent third party, either an assessment expert or another employer,
- Using your professional body to deliver and quality assure assessments.

Apprentices undertaking the Aerospace Manufacturing Fitter Standard will undertake both competence and knowledge qualifications as part of their Foundation and Development phases of training.

These awarding organisations are regulated by Ofqual and have mechanisms in place that allow them to remain impartial and objective, maintain standards over time, and ensure qualifications and related assessments are delivered in a fair and consistent manner. This includes the approval and on-going monitoring of assessment centres, external verification of assessment activity, and ensuring results are based on sufficient, valid and reliable evidence. Awarding organisations will also set and mark external tests for the qualifications (see criterion 1 above), which will also ensure independence in the assessment and its outcome.

As part of the End of Scheme Assessment, an independent assessment will be undertaken by a nominated Professional Engineering Institution (PEI) which will not have any connection with the learner, or have been involved in any previous assessment activity. The nominated Professional Body will use information from the Engineering Technician Performance Indicators Recording Form and information derived from the End of Scheme Assessment and Employer Sign Off, post viva to review each individual Apprentice against the Engineering Council's UK SPEC 'Engineering Technician' criteria. This assessment will look for evidence that the Apprentice knows how to do the job and was able to go beyond the immediate requirements, using their initiative and experience to solve a problem or improve a process (see above for further information).

3. Delivering Consistent (Reliable) Judgements

Your assessment strategy and tools must ensure that employers can have confidence that apprentices assessed in different parts of the country, at different times, by different assessors have been judged in the same way and have therefore reached the same standard of occupational competence.

The assessment plan must include a description of how assessment providers will ensure that materials, tools, questions etc. used for assessment are standardised across different sites.

The plan must also describe how assessment providers will ensure assessors are making the same judgements e.g. training of assessors/ provision of support materials.

The Competence and Technical Knowledge qualifications for this Standard have been developed in close co-operation with Awarding Organisations. Awarding organisations have robust arrangements for ensuring that apprentices assessed in different parts of the country, by different assessors, will be judged in the same way, that results are based on sufficient, valid and reliable evidence, and that all learners who achieve the qualifications will have reached the same standard of occupational competence.

Such arrangements include: the provision of clearly defined qualification specifications and related guidance; exemplar assessment materials; robust approval and monitoring of assessment centres; external verification; and the setting, marking and moderation of external examinations. These arrangements are subject to monitoring and review by Ofqual to ensure consistency of assessment practice and compliance with the General Conditions of Recognition and other relevant regulatory arrangements.

In addition, the Aerospace Trailblazer group has agreed that assessors, internal verifiers and external verifiers must be trained and competent to undertake their respective roles. In particular, they must have appropriate experience and hold relevant qualifications, in order to provide assurance that assessment, verification and related activity will be sufficiently robust, and that consistent and reliable judgements can be made. See the *Employer Occupational Brief: Occupational Competence and Technical Knowledge Qualification Assessment Strategy* attached for further information about these requirements.

		Participating AOs have joined our Trailblazer group meetings and are required to give us meeting by meeting up updates on how the assessment strategy will be met. This particularly includes evolving arrangements for ensuring consistency of grade allocation across AOs for the technical knowledge component.
		The professional Institutions that will carry out independent assessment of each apprentice against the Engineering Council's UK SPEC requirements, and have robust criteria (see hotlink below to UK SPEC) to ensure the consistency of their approach. http://www.engc.org.uk/professional-qualifications/standards/uk-spec
		We have <u>required the AOs to collaborate</u> – this is the <u>first</u> <u>time they have done this</u> and we have told them we <u>require</u> a consistent approach to assessment and grading.
4. Delivering Accurate (Valid) Judgements	The method of assessment must be appropriate to the content. The assessment methods and tools will need to make sure that the decisions reached on every apprentice are an accurate reflection of their competence. The skills, knowledge and behaviours listed on the Standard should therefore guide how each assessment tool is designed.	Assessment tools and methods for the Competence and Knowledge qualifications, to be delivered in the Foundation and Development phases, are being designed to be fit for purpose, taking into consideration the skills, knowledge and behaviours that have been defined within the Standard, the way in which the sector operates, and the need for learners to develop competence and confidence in a structured and managed way over the course of the apprenticeship programme. This, supported by arrangements highlighted against criterion 3 above will provide confidence that the assessment arrangements will deliver accurate and valid judgements. See 'Employer Occupational Brief:
	This should be clear from the assessment methods that you	Occupational Competence and Technical Knowledge Qualification Assessment Strategy' (attached) for further

	I to about a to occur as a consequence of	Information about the accessor of the least
	include in your assessment plan.	information about the assessment methods.
		The Employer Endorsement Phase will provide further confirmation of each Apprentice's competence through:
		The End of Scheme Assessment and Employer sign off, which will review each Apprentice's achievements against the Standard and elicit their depth and breadth of understanding of the Engineering Technician criteria; through completion of the Engineering Technician Performance Indicators Recording Form.
		The independent assessment of each Apprentice against the Engineering Councils UK SPEC Engineering Technician Criteria.
		There will be <u>briefing provided</u> to <u>ensure that those</u> conducting the end of scheme assessment are fully prepared to carry out that assessment on a consistent basis against a clear framework.
5. Synoptic Assessment	The end point assessment should be synoptic , requiring the apprentice to identify and use effectively in an integrated way an appropriate selection of skills, techniques, concepts, theories, and knowledge from across their	Our Apprentice 'End of Scheme Assessment and Employer Sign Off' brings together all the AO assessed components of the Foundation and Development training phases of the standard and examines the evidence of completion of these components in a synoptic fashion against the full standard. The Independent Assessment of the Apprentice against
	training. Synoptic assessment should look to test skills and knowledge together, for example asking someone to demonstrate	the Engineering Councils UK SPEC Engineering Technician Criteria is a synoptic assessment as it requires the apprentice to demonstrate and record in detail how they have applied, competence, knowledge and behaviours to

	their ability to accurately build an	solve real life work problems and achieve a successful
	engine to specification and quality	outcome.
	criteria and asking them to explain	outcome.
	why they are doing what they are	The Engineering Institutions see this as a synoptic
	doing as they build it (showing their	assessment. An email from one Professional Engineering
	knowledge and skill). Synoptic	Institution (PEI) is attached to confirm its view on this matter.
	assessment should also focus on	
	higher order skills, which give	
	assurance of lower level skills	
	without requiring specific	
	assessment. For example, the	
	baker doesn't need to be assessed	
	that they can use an oven if they	
	are able to successfully bake a	
	cake.	
	This should be clear from the	
	assessment methods that you	
	include in your assessment plan.	
6. Graded Assessments		The knowledge qualifications are graded Pass, Merit and
		Distinction.
	The Apprenticeship must include	
	graded assessments, and a	The approach taken by Awarding Organisations on grading
	grade applied to the whole	and assessment is based on the common approach used by
	programme. The grading structure should have at least one level	all Awarding Organisations when developing and awarding
		GCSEs which is approved by the regulator Ofqual. External
	above pass.	Assessment will be based on a series of Assessment
		Objectives and applied to the learning content of each
		unit. Grade descriptors will set out the requirements of each
	The assessment plan must include	level along with grade boundaries which will be
	a description of how many grades	common. Internal Assessment will be based on the same
		CONTINUIT. INTERNAL ASSESSINENT WILL DE DASEU ON THE SAME

	you will be using, how they will be applied, and to which elements of the assessment.	set of learning criteria with grade descriptors setting the standards for each level of grading. Using this approach will ensure consistency between Awarding Organisations and between different types of qualifications. It is the Aerospace Trailblazer group's view that competence achievement in both the Foundation and Development phases are binary. Therefore apprentices will only be 'competent' or 'not competent' in competence assessments, i.e. grading of Pass, Merit and Distinction will not apply to these components. The certificate of apprenticeship will demonstrate that the individual is competent and fully meets the requirement of the standard, and the grading of the knowledge elements will differentiate the apprentices performance overall.
7. Affordability	Your approach should consider how cost effectiveness in assessments will be delivered while still meeting the quality objectives. This may include a consideration of the mix of assessment approaches. The assessment plan must include	See page 11 of the 'Employer Occupational Brief: Occupational Competence and Technical Knowledge Qualification Assessment Strategy' (attached) for further information about grading. Costs We have illustrated assessment costs within the MSG and this has been accepted. We have also clearly stated within the MSG that the Eng Tech Independent Assessment will be £40 and this has been agreed by our institutions at CEO level and represents exceptionally good value for money. We have also had assurances that the relevant resources will be made

	an explanation of what proportion of the total costs of the Apprenticeship will be attributed to assessment.	available to support this process We cannot predict precisely what the costs of assessment will be at this point in the qualification development process, but previous practice leads us to presume that these will not be substantially different to the current apprenticeship
		assessment arrangements. Therefore they represent excellent value for money. (see attached letters of support)
8. Manageability/Feasibility	You will need to set out how the assessment process will be deliverable on the scale required for the number of apprentices. For example, are there the centres, assessor's etc. necessary to deliver this?	The Awarding Organisations and have excellent capacity to meet the scale requirements for the envisaged number of starts both initially and in subsequent years. AOs have produced a detailed Gant chart showing each aspect of implementation of the new qualifications within the standard against the agreed 2015/6 timelines.
	If you are planning to run assessments through a new assessment body your plan must include a description of how you would practically operationalise your assessment proposal, including any workforce considerations, and an indication	Workplace assessors, Internal Verifiers and External verifiers will be trained to handle the technical assessment requirements of the Foundation and Development Competence Knowledge qualifications (with embedded behaviours) as detailed in the Employer Occupational Brief: Occupational Competence and Technical Knowledge Qualification Assessment Strategy.
	of how long it will take you to put resources in place. Where using an existing assessment body or awarding organisation this reassurance may be provided by them rather than the Trailblazers directly.	Institutions have already given commitment to offer an independent assessment service for verifying UK SPEC Eng Tech status (see attached letters of commitment). Resources to support this are being developed for the envisaged number of starts both initially and in subsequent years.

O Professional Body	Where a professional bady /	The relevant professional hadise have been involved in the
9. Professional Body Recognition	Where a professional body / bodies has recognised the standard our expectation is that the professional body will also recognise the assessment process, as completion of the Apprenticeship should ensure the apprentice is ready to secure professional accreditation.	The relevant professional bodies have been involved in the development of the Aerospace Manufacturing Fitter Standard from the outset, and recognise and support the assessment processes involved. This is further evidenced by the fact that successful completion of the Apprenticeship, including the independent assessment of the Apprentice against the Engineering Councils UK SPEC Engineering Technician Criteria by the profession bodies, will lead to professional recognition. The financial criteria deliberately restrict any payment for professional recognition. This is why we have separated eligibility from automatic registration with an institution Apprentices cannot complete the standard until they have met the Eng Tech criteria and have been signed off by the relevant Institution.
10. Assessments being largely at the end (Trailblazer 1s)	There is an expectation that in most cases at least two thirds of the assessment must take place at the end of the Apprenticeship. Continuous assessments are still permitted but will carry much less weight when judging if an apprentice has demonstrated mastery. The assessment plan should set out the proposed timing of when different assessments take place	 As requested this Assessment Plan includes a clear end Assessment. See first page of the assessment plan The nature of engineering apprenticeships is that they are long (typically 42 months) and apprentices do real jobs from year one. They have to be assessed as competent and safe to perform in the workplace and so continuous assessment has to form a key component of engineering apprenticeships Having said that there is now a much greater weighting to final assessment – in the Employer Endorsement Phase with both the employer formally signing off their apprentice as competent and the engineering institution signing off the apprentice on an

	for apprentices and the weighting attached to each assessment.	 independent basis as having met the EngTech status The breakdown that we submitted to the Minister (and were approved) as part of the initial submission of the Standard showed 20% of the assessment linked to Endorsement Phase and 65% in total to the Development and Development Phase Taken together the assessment approach we detail here is fundamentally different and represents a significant improvement on what we currently do, namely: 1) We have introduced a formal gate review at the conclusion of the foundation stage at end of year one. Apprentices will not progress beyond this without successful mastery of this stage. 2) We have introduced a viva and formal overall assessment of competence as part of the employer endorsement phase by employers against a common industry wide framework. They will need to demonstrate a full mastery of all skills & knowledge across the apprenticeship' 3) We have introduced an alignment of competence to EngTech status - the recognised professional industry Standard. This is totally new and is backed by all the relevant Professional Engineering Institutions (PEIs). This also looks forward as well as back and provides an opportunity to record future development activity linked to professional development.
11. UK. Wide Applicability	Employers who operate UK wide	The Aerospace sector generally, and the employers in
-	need to know that Apprenticeship	particular, are very mindful that its apprenticeships must be

Standards agreed in England will be replicated in the other three Nations to avoid unnecessary complication	available across all of the home nations and as such were careful to develop the EOB to be directly aligned to the existing National Occupational Standards that continue to be valued by and used in the devolved administrations.
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