

# Apprenticeship Standards “Trailblazer”

# What are Apprenticeship Standards?

- **Employer led and designed** Apprenticeship Standards and Assessment Plans
- Must set out the requirements for **'full'** Occupational Competence
- Focused on the outcome of an apprenticeship via independent End Point Assessment (EPA)
- Apprenticeships will be **graded**
- Aligned to recognised **Professional Standards** (where they exist)
- Set out minimum requirements for English and Maths. Digital Skills are optional
- Standard allocated to one of fifteen funding bands (£1,500 - £27,000)

# Apprenticeships Standards

## The Development and Approval Process

- 1) Employers produce and submit an Expression of Interest (EOI).
- 2) Produce Apprenticeship Standard and submit to IfA for approval
- 3) Produce Apprenticeship Assessment Plan and submit to IfA for approval
- 4) Produce and submit apprenticeship costing template
- 5) Apprenticeships – Funding Band agreed and Apprenticeship published and identified as “Ready for Delivery”

### Information on Apprenticeship Standards

<https://www.gov.uk/government/collections/apprenticeship-standards>

<https://www.gov.uk/government/publications/apprenticeship-standards-list-of-occupations-available>

# Apprenticeships – The Standard



- The Apprenticeship Standard - Maximum **3** sides of A4 – **now some flexibility**

## Mandatory

- Title of the Apprenticeship Standard – Occupation(s)
- Occupational Profile
- Skills and knowledge to achieve full occupational competence
- Behaviours required for the occupation
- Maths and English (Level 2 for Level 3 and above Standards. Level 1 and take Level 2 test for Level 2 Standards). - Digital Skills are optional.
- Duration of the Apprenticeship – min one year (Engineering Typ. 36 to 48 months)
- Level
- Review date

## Optional

- Entry requirements
- Mandatory qualifications
- Professional Body recognition/alignment e.g EngTech, IEng or CEng
- Reference made to an Employer Occupational Brief



# Apprenticeships – The Assessment Plan

- A clear explanation/diagram to explain to an apprentice how they can expect to be assessed against the apprenticeship standard, including what they need to have achieved in order to apply for the apprenticeship completion certificate.
- Assessment - What you are planning to assess - (i.e. the content to be assessed)
- Assessment - How you are planning to assess it (i.e. the methods of assessment)
- Assessment - Who will be carrying out the assessment(s)
- Implementation – Affordability - % of funding for EPA, Consistency and Volumes
- **Assessment must:**
  - Set out any “on programme” gateway assessment requirements
  - Have an end point assessment
  - Be independent and carried out by an organisation that is on the Register of Apprenticeship Assessment Organisations (RoAAO)
  - Graded eg Pass, Merit and Distinction
  - Deliver consistent, reliable and valid judgements
  - Set out internal and external QA process
- Apprenticeship Costing (on programme training and end point assessment)

# Typical Example of an Employer led Development Group



# AME Apprenticeship Standards supported by Semta



Key – SA – Standard Approved      RD – Ready for delivery

EPA – Approved for End Point Assessment

## Aerospace and Aviation

- Survival Equipment Fitter L3 (Military) **EPA – Band 15**
- Aviation Maintenance Mechanic L2 (Military) – **EPA – Band 10**
- Aircraft Certifying Engineer L4 (Fixed and Rotary Wing) Level 4. **EPA – Band 14**
- Aerospace Engineer L6. **EPA – Band 15**
- Aerospace Software Development Engineer L6. **EPA – Band 15**



# AME Apprenticeship Standards supported by Semta



## Automotive (Engineering and Manufacture – sector wide)

- Electrical/Electronic Support Engineer L6 – **RD – Band 15**
- Control/Technical Support Engineer L6 – **RD – Band 15**
- Manufacturing Engineer L6 – **RD – Band 15**
- Product Design and Development Engineer L6 – **RD – Band 15**





# AME Apprenticeship Standards supported by Senta



## Maritime Defence

- Maritime Electrical / Mechanical Mechanic L2 - **SA**

## Rail Engineering

- Rail Engineering L2, 3 and 4 (Track, Overhead Line, Electrification, Traction & Rolling Stock, Signalling, Telecoms, Rail Systems) – **EPA L2 – Band 10, L3 & L4 – Band 15**



# AME Apprenticeship Standards supported by Semta



## Sector Wide

- Composite Technician L3 - **EPA – Band 15**
- Non Destructive Testing L2 and 3 – **EPA - L2 Band 10, L3 Band 12**
- Welding L2 and L3 – **EPA – L2 Band 9 and L3 Band 10**
- Advanced Systems Engineering L7 – **EPA – Band 15**
- Heritage Engineering Technician
- **Engineering Technician L3 Battersea – EPA – Band 15**
- **Engineer (Post Graduate) L7 Battersea – EPA – Band 15**
- **Advanced Manufacturing Operative L2 – Battersea**
- **Engineering Operative L2 - Battersea**



# AME Apprenticeship Standards supported by Semta



## Expressions of Interest Submitted

- Propulsion Technician

## Priorities for New Expressions of Interest

## Battersea Family of Apprenticeships

- Senior Technician L4 - Battersea
- Junior Engineer L6 - Battersea



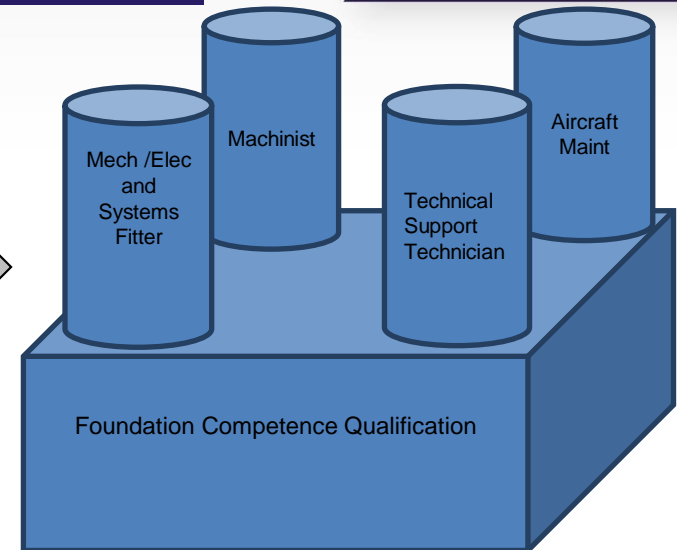
# What are Apprenticeship Standards?

**Challenges/issues some AME employer Groups have had to resolve with BIS/DfE.  
Meeting being held on the 15<sup>th</sup> June with the IfA**

- Being able to include mandated Vocational Qualifications in the Apprenticeship
- Specifying on going assessment throughout the apprenticeship
- Grading of the Apprenticeship and therefore occupational competence
- End Point Assessment and therefore occupational competence assessed by an independent third party
- Frequent changes in the requirements/criteria to get an Apprenticeship Standard and Assessment Plan approved for delivery and end point assessment
- Proliferation of Standards, no common/coherent model plus having to decide from start of the apprenticeship the specific occupational route/pathway e.g Fitter, Machinist, CAD/CAM Technician

# The 'Battersea' Model

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The AME Sector 'Battersea' model includes a range of occupational pathways/routes at a given level in **one** Standard and Assessment Plan

Common set of design principles for the apprenticeship (On Programme qualifications and EPA)

Allows for progression and transferability of skills, knowledge and behaviours

Avoids proliferation of Standards

# AME Apprenticeship Standards supported by Semta



## Engineering Technician Level 3 – RD – Band 15

### Occupational Pathways:

- Aerospace Manufacturing Fitter
- Aerospace Electrical/Mechanical and Systems Fitter
- Aircraft Maintenance Fitter Technician (Fixed and Rotary Wing)
- Airworthiness Planning, Quality & Safety Technician
- Maritime Mechanical Fitter
- Maritime Pipeworker
- Maritime Fabricator
- Maritime Electrical Fitter
- Mechatronics Maintenance Technician
- Product Design and Development Technician
- Machining – Advanced Manufacturing Engineering
- Technical Support Technician, Advanced Manufacturing and Engineering
- Tool making, Tool & Die Maintenance

### Other known pathways to be added as soon as possible

- Manufacturing Fitter - in development
- Fabricator
- Maintenance Technician (mechanical, electrical/electronics, instrumentation and control, fluid power, service supplies, plant and equipment)



# AME Apprenticeship Standards supported by Semta



## Post Graduate Engineer Level 7 – RD – Band 15

### Occupational Pathways:

- Research and Development Engineer
- Design and Development Engineer
- Systems Integration Engineer
- Quality Assurance/Compliance Engineer
- Test/Qualification Engineer
- Manufacture/Production Engineer
- Maintenance Test Engineer
- Product Support Engineer
- Decommissioning/Disposal Engineer
- Supply Chain Procurement
- Engineering Business Manager



# Level 3 Engineering Technician Standard and Assessment Plan



A2 Diagram 2a: Summary approach to “On-Programme” and End Point Assessment – Engineering Technician

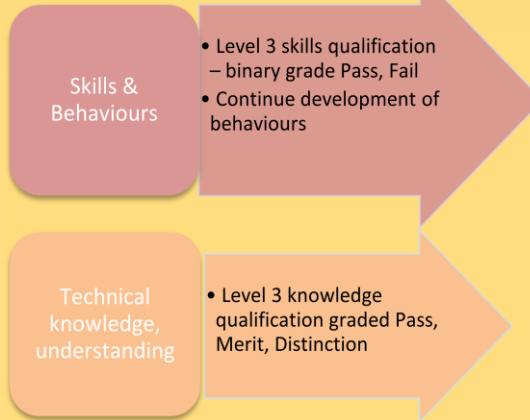
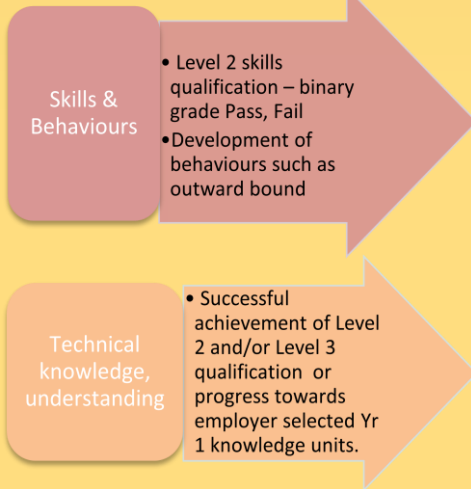
**Gateway 1**

**Gateway 2**

**On Programme Assessment: Foundation Phase**

**On Programme Assessment: Development Phase**

**End Point Assessment**



The employer undertakes a Portfolio based Occupational Competence Validation Interview (Viva)

A nominated Professional Engineering Institution (PEI) or Military Independent Assessment Authority (MIAA) undertakes the independent assessment to determine if the apprentice has met the Engineering Technician requirements as defined by the UK-SPEC or relevant Military Professional Competence (MPC) requirements. The PEI/MIAA will also undertake an independent quality assurance of the Employer Viva Interview documentation and checks that the employer approved mandatory qualifications achieved during the on programme phase and checked at Gateway 2 have been achieved and certificated (See Diagram 1a for full illustrated details of End Point Assessment)

**Mandatory Qualifications**  
See Section E1 for details on the mandated qualification requirements

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**Apprentice Completion Certificate: Final employer Sign Off & PEI/MIAA applies for the Apprentice's completion certificate.**

**Gateway 1: Review & Assessment – Undertaken by the employer**

The following must be completed before the apprentice can progress to the Development Phase of the apprenticeship:

- The employer specified Level 2 Foundation Occupational Competence Qualification
- Where applicable the Level 2 Foundation Knowledge Qualification and/or satisfactory achievement /progress towards Yr 1 Level 3 Technical Knowledge units as applicable to the occupational pathway requirements
- Satisfactory progress towards the employer required behaviours

Note. As well as the mandated qualifications the following occupational pathways also requires the successful completion of an externally moderated Foundation Phase assessment: Mechatronics Maintenance Technician and Product Design and Development Technician.

**Gateway 2: Review & Assessment - Undertaken by the employer**

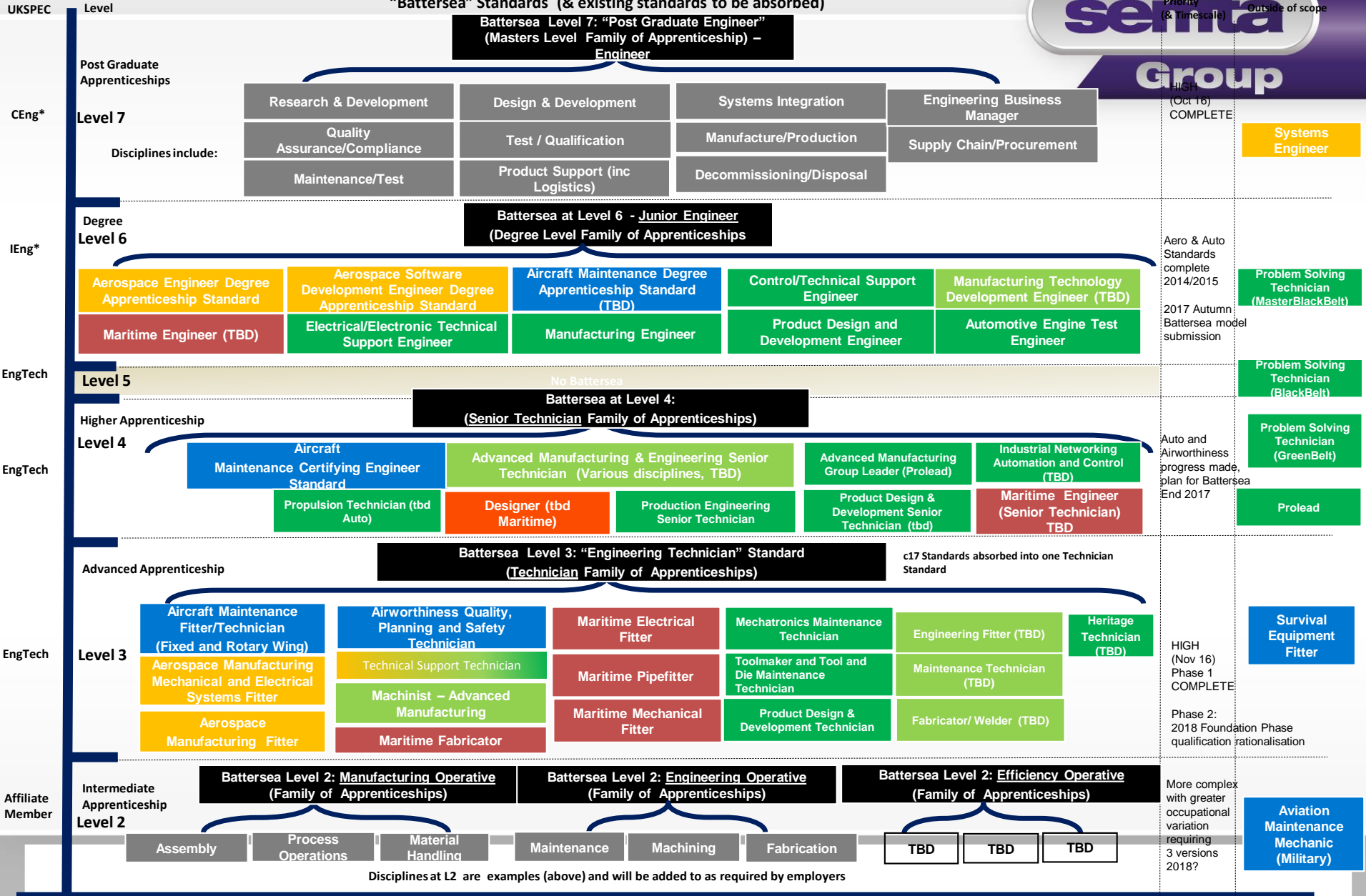
In order to be ready for End Point Assessment the apprentice must have achieved:

- Pass, Merit or Distinction in the selected Level 3 Technical Knowledge Qualification
- A binary grade Pass in the Level 3 Occupational Competence Qualification
- The required Behaviours aligned to EngTech or Military Professional Competence
- English and Maths qualifications at Level 2

# The "Battersea Model": Families of Apprenticeship Standards (Simplification, transferability, the avoidance of proliferation and fragmentation)

KEY:

Aerospace	Advanced Manufacturing Engineering
Continuing Airworthiness/MRO Occupations	Automotive
	Maritime Defence



(\*These are Pass Grades - at Levels 6 / 7 with prior experience it may be possible to attain IEng/CEng, recognising an interim registration)

# Questions?

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[www.semta.org.uk](http://www.semta.org.uk)

# Institute for Apprenticeships

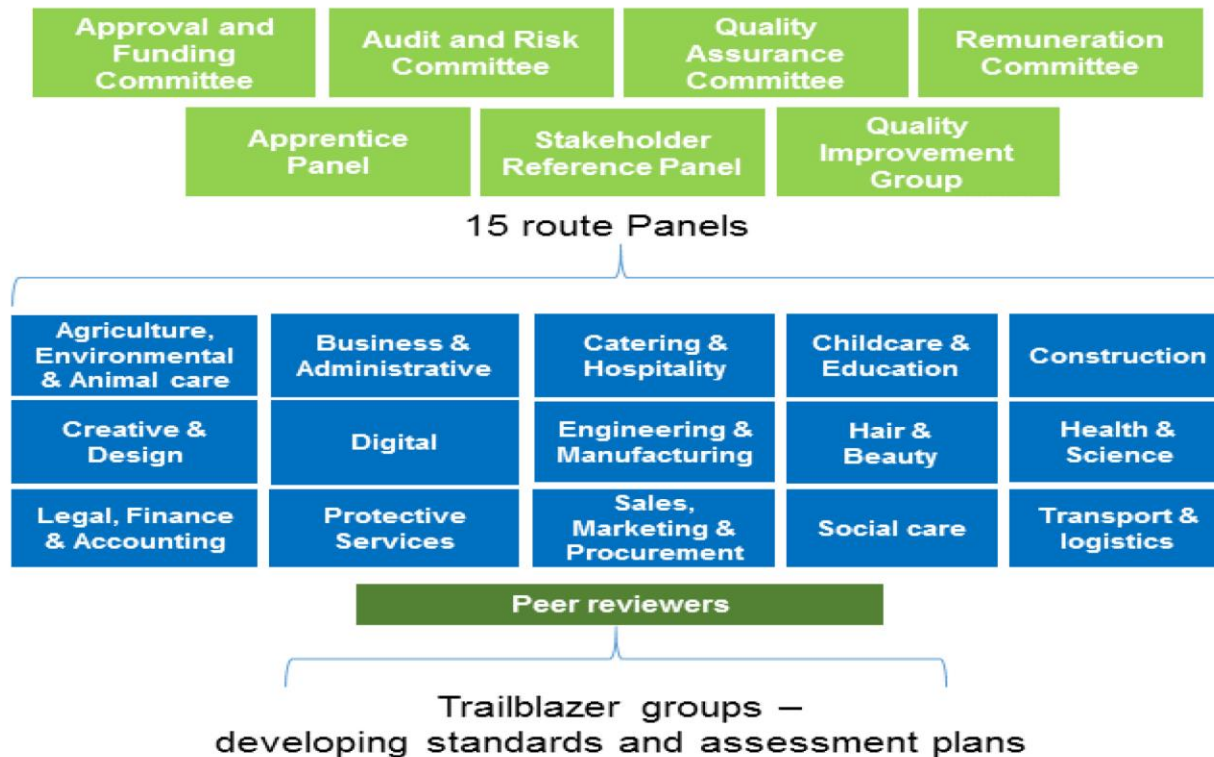


- On 1 April 2017 the Institute was launched as a Crown Non-Departmental Government Body.
- An Institute for Apprenticeships employer-led Board comprised of eight members, plus a Chair and Chief Executive. The Institute's Board was appointed on 27 January 2017 with Antony Jenkins confirmed as Chairman. The Board are:
  - Dr. Katherine Barclay, Director Academic Liaison, Pfizer UK
  - Sir Gerry Berragan, former Adjunct General and British Army apprentices ambassador
  - Bev Robinson, Principal of Blackpool and Fylde College
  - Paul Cadman, Human Resources Director for Walter Smith Fine Foods Limited
  - Dame Fiona Kendrick, Chair and CEO of Nestle UK and Ireland since 2012
  - Dame Asha Khemka, Principal and Chief Executive of West Nottinghamshire College Group
  - Robin Millar CBE, Chair of Blue Raincoat Chrysalis Group
  - Toby Peyton-Jones, Human Resources Director for Siemens in the UK and North West Europe



## Employer led organisation

### The Institute for Apprenticeships Board



# Apprenticeships Standards

- **15 Route Panels** of industry experts aligned to occupational groupings, who review and recommend apprenticeship standards and assessment plans to the Approvals and Funding Committee, and provide a strategic perspective across each route.
- **An Apprentice Panel**, which reports directly to the Board. The panel is made up of apprentices from different occupations and experiences. The panel decides for itself which issues to focus on and challenges, and makes recommendations to, the Board.
- **Peer reviewers** who review new apprenticeship standards and assessment plans provide comments and recommendations to the relevant Route Panel to inform the approval process.
- **Trailblazer groups** of employers that come together to propose a new standard for their occupation, develop the knowledge, skills and behaviours for that standard, and design an assessment plan to support it.

# Institute for Apprenticeships

- The Institute will take the lead on a number of ongoing reforms to improve the apprenticeships system. Many of these reforms were initially driven by the 2012 Richard Review findings on the old apprenticeships system, including that:
  - the system was overly complex – with a huge number of qualifications and possible combinations, and overly-detailed specifications
  - continuous assessment only tested the incremental progress of the apprentice, rather than whether they had reached the desired level of competency
  - providers didn't respond first and foremost to employer needs
- The government trailblazer programme was launched as a result of these findings, with the creation of the Institute the latest step on this journey.
- There are 3 defining features of the emerging system that the Institute will regulate:
  - employer-designed apprenticeship standards and assessment plans
  - graded end point apprenticeship assessments
  - external quality assurance of end point assessments

# Institute for Apprenticeships

- **Challenge - The end-to-end process of developing a new standard takes too long**
  - Clearer expectation-setting at the outset, including the Institute and trailblazer signing up to an 'Expectations of the role' document.
  - Review of proposals, standards and assessment plans submitted for approval to identify those that require additional work. These will be provided with additional support to address each of the areas before they are reviewed by Route Panels.
  - Flexibility for trailblazers to submit their assessment plan alongside, rather than after, their standard, if this is what would work best for them. This will halve process time.
  - An offer for the trailblazer chair to participate in the approvals meeting to answer questions in the moment.
  - Tailored support for trailblazers, including access to assessment specialists when needed.
  - Digital notification of progress and next steps.



# Institute for Apprenticeships

- **Challenge - Overlap between different standards**
  - Better signposting for trailblazers to find out about standards that are in development.
  - Development of an occupational map – all new proposals will be expected to align to an occupation in the map. If it doesn't align, the trailblazer will be asked to present further evidence on why it should be approved.
  - Short term activity with partner bodies to kick-start the provider and assessment markets for particularly narrow standards.
- **Challenge - Guidance material changes too regularly and is hard to navigate**
  - While policy could still change over time, the Institute will make every effort to limit these changes and communicate them clearly to employers when they are needed.
  - Guidance will be made available digitally to all employers (and other stakeholders), and tailored to the stage of the process that the employer has reached.

# Institute for Apprenticeships

- **Challenge - Professional expertise needed to review and approve standards**
  - Industry-led Route Panels and the Institute Board to replace the government minister as approver of new standards.
  - Relationship managers to be aligned to routes and increasingly become specialists in a limited number of sectors.
  - Offer to employers of their relationship manager spending half a day shadowing their workplace to build understanding.
  - Enhanced peer review added to the approval process.
- **Challenge - Limited use of outcome metrics to influence provision**
  - The Institute's route-based evaluations of standards will enable it to build a holistic picture of the impact that different standards have on outcomes for learners, employers and the wider economy.
  - The Institute will draw on a wide range of data for this, including wage returns, destination data and economic impact where available. The outcome of these evaluations could lead to recommended changes to funding allocations.

# Institute for Apprenticeships

- **Revised “How to” Guide for Trailblazers – Published in April**
  - Clarification of what constitutes a degree level apprenticeship (paragraph 1.17).
  - Clarification that degree apprenticeships are not covered by the mandatory qualifications criteria (paragraph 2.2).
  - Outline of funding rules relating to licences to practice (paragraph 2.5) – see ESFA funding rules for full details.
  - Evidence to justify a qualification under the hard sift criterion must now include at least ten recent job advertisements when submitting the draft standard for approval (paragraph 2.8).
  - As trailed at the January Trailblazer conference and subsequently in an email to all Trailblazers, after the 29 June 2017 submissions deadline, the Institute will no longer accept the submission of any draft standards for approval that include (and hence mandate) a qualification in development (paragraph 2.9).