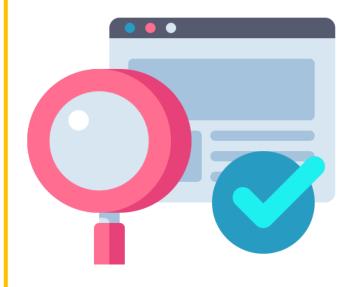


EPA Handbook

ST0495: Rail and Rail Systems Engineer

Please note this Standard is retired with effect from 26.03.2025.



Version history

Version	Date	Change(s) made	Section(s)	Publication source(s)
0.1	30/11/2022	Input draft content	All	Dev team
0.2	23/05/2023	Amended to new template	All	
0.3	14/06/2023	Scrutiny Check	All	RR - HAD
0.3	17/03/2025	Standard retired	NA	Ops Team

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About Open Awards

Set up in 1981 as Open College Network North West Region (OCNNWR) and now trading as Open Awards, we have been in business for 40 years. During that time, we have helped thousands of learners get started on the education ladder, return to learning, achieve qualifications to help their careers and progress into further and higher education.

We were the first awarding organisation to design qualifications and courses based on credit accumulation so that learners could achieve in "bite sized" chunks. We designed the units and qualifications that became the basis of the Qualification and Credit Framework (QCF).

We are more than just another Awarding Organisation. Uniquely, we have deep roots in the education sector as forward-thinking organisations, FE Colleges and Local Authorities, created Open College Networks (OCNs) to promote education and achievement. We have a governance structure, which is drawn from the people who use our services – our providers and centres – so that we can truly say we are "of the sector and for the sector". Our purpose is to meet the needs of our provider organisations and their learners. We are a not-for-profit organisation and a registered charity and we use our funds to invest in our products and services to support the very organisations that use our products.

Open Awards qualifications are approved by the regulators (Ofqual in England and CCEA in Northern Ireland) and are designed to meet the needs of learners and employers. The range of qualifications we offer is designed to meet the aspirations of learners who are seeking a stepping stone to their career, returning to learning or wishing to progress and build their skills and experience. We are constantly adding to our qualification portfolio to ensure that it is fresh and up to date.

We are delighted to have expanded our scope, becoming an end-point assessment organisation (EPAO) for a growing number of apprenticeship standards in England approved by the Institute for Apprenticeships and Technical Education (IfATE). Our EPAO number is: **EPA0565**

Occupational overview

A Rail and Rail Systems Engineer works as part of a multi-disciplinary team, but with personal responsibility and accountability for projects related to their specialist area. They can work in multiple railway worksites or in technical offices. They have a strong understanding of how the railway works as a whole and are able to assess the impact of their work and its interfaces with other teams. This includes an understanding of conventional rail or high-speed rail, or both.

They are responsible for the provision of rail specific technical engineering knowledge relating to a specific aspect of the railway. Specialist areas include rail specific civil engineering, rail track, rail signalling and control, rail systems & integration, rail traction and rolling stock, rail telecommunications, network and digital and rail electrical, mechanical and building services.

The overarching role of all Rail & Rail Systems Engineers is to ensure the railway runs smoothly on a day-to-day basis and to provide rail specific engineering knowledge across their own organisation to ensure this is the case. This includes supporting work relating to the integrated safe design, construction, installation, maintenance, renewal, or decommissioning of assets and equipment, to provide a safe and reliable railway.

Key duties can include:

- Planning, processing, maintenance and production of railway assets and equipment.
- Rail specific input to operational processes
- Taking proactive actions and decisions to avoid railway asset, equipment, process and systems failures within their area of influence.
- Working across the organisation to identify areas for rail system improvement.
- Supporting or supervising individuals and teams in the delivery of Rail Engineering and Rail System tasks within their designated discipline
- Providing and sharing specialist knowledge across the organisation and ensuring that the impact to the railway of any changes is identified.

Further details on the knowledge, skills and behaviours associated within the occupational standard are in Appendix 1 and are also accessible on the IfATE website¹.

¹ https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-and-rail-systems-engineer/

Standard information

Level: 5

Reference: ST0495

Approved for delivery: 24 September 2018 (updated: 26 January 2023)

Route: Engineering and manufacturing

Typical duration to gateway: 24 months (this does not include the EPA period)

Employers involved in creating the standard: Network Rail, Alstom Transport UK Limited, DEG Signal Ltd, Hitachi Rail Europe Ltd, Northern Rail, Siemens Mobility, Thales, Transport for London, Amey, Arup, Babcock International Group, Bombardier, Morson, Northern Rail, Siemens Rail Automation Holdings Ltd, VolkerRail Ltd

External Quality Assurance Provider: Ofqual

Entry requirements

Individual employers will set the selection criteria for their Apprenticeships in conjunction with their provider. Apprentices without Level 2 English and maths will need to achieve this level prior to taking the end point assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3, and British Sign Language qualifications are an alternative to English qualifications for those whom this is their primary language.

Progression opportunities

Apprentices who successfully complete their Rail and Rail Systems Engineer Apprenticeship are likely to attain, or be able to work towards roles such as: Track Engineer, Rail Civil Engineer, Asset Engineer, Rail Systems Integration Engineer, Rail Project Engineer, Approvals and Certification Engineer, Lead Signal Design Engineer, Signalling & Control Systems Engineer, Telecomms Engineer, Traction and Rolling Stock Engineer, Rail Electrification Engineer, Rail Mechanical Engineer and Rail Building Services Engineer.

Professional recognition

The experience gained and responsibility held by the apprentice on completion of the apprenticeship partially contributes to the requirements for IEng.

On-programme requirements

A summary of the on-programme requirements for each apprentice is outlined below.

- Training to develop the knowledge, skills and behaviours (KSBs) of the occupational standard.
- Training towards English and mathematics Level 2, if required.
- Compilation of a portfolio of evidence to outline apprentices' work during their apprenticeship programme, mapped to the <u>KSBs from the occupational</u> <u>standard.</u>

Registration, gateway and booking

Registration with Open Awards

Registration is the point at which an employer signals that it has selected Open Awards as their end-point assessment provider. Employers are encouraged to register their apprentices with Open Awards, through the training provider, as soon as possible. Our EPAO number is: **EPAO565**

Registrations can be made by providers via the EPA Section of Open Awards' Secure Portal. Early registrations enable Open Awards to initiate early dialogue to ensure arrangements can be planned, such as IEPA availability, to ensure end-point assessment is delivered as smoothly as possible in a timescale that supports the employer's planned gateway date. It also enables the training provider to access a range of practice and preparation materials, so they and the employer can support the apprentice to prepare for end-point assessment.

Please note that Open Awards are only able to accept registrations from training providers who are currently on the Register of Approved Training Providers (RoATP).

In line with the Education & Skills Funding Agency's (ESFA) requirements, the employer must inform Open Awards of the planned gateway and end-point assessment dates at least three (3) months in advance.

Gateway

Gateway is the point at which the employer reviews their apprentice's knowledge, skills and behaviours, and formally confirms the apprentice has reached occupational competency, completed all the mandatory elements of their apprenticeship programme and are ready for end-point assessment. The training provider may support the employer in making this decision, but the decision is made by the employer, with the apprentice also confirming they are ready for end point assessment.

End-point assessment must be completed by an independent End-point Assessment Organisation (EPAO) selected by the employer, such as Open Awards, from the ESFA's Register of End Point Assessment Organisations (RoEPAO).

The end-point assessment period should only start and the end-point assessment arrangements confirmed, when:

- the employer is satisfied that the apprentice is consistently working at or above the level of the occupational standard
- all of the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to Open Awards

For this standard, end-point assessment must be completed within a period lasting a maximum of sixteen (16) weeks, beginning when the apprentice has met the end-point assessment gateway requirements. The EPA must be completed over a maximum total

assessment time of 14 weeks and one hour (i.e. 14 weeks for the Workplace Project and one hour Vocational Competence Discussion), within a 16-week period starting once the apprentice has met the Gateway requirements.

Gateway requirements

The training provider must provide Open Awards with all required evidence to enable Open Awards to undertake the necessary gateway checks. This evidence includes:

- fully completed and signed Gateway agreement and authenticity form.
- Apprentices without English and mathematics at Level 2 must achieve Level 1 English and mathematics and Level 2. The ESFA maintains a list of current and prior qualifications accepted as meeting the minimum English and maths requirements for apprenticeships at Level 2 and above. The most current list can be found on the ESFA website². For those apprentices with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.
- for this standard, apprentices are also required to have completed a portfolio of evidence.

Open Awards cannot accept end-point assessment booking requests until the gateway checks have been satisfactorily completed, so failure to submit all the necessary information or evidence will delay this process. Open Awards will contact the training provider if the information or evidence is missing or insufficient, so that this can be rectified as quickly as possible. Open Awards aims to complete gateway checks within five (5) working days from receipt of the gateway declaration and authenticity form, subject to provision of all necessary information and ancillary evidence.

Once gateway checks have been successfully completed, Open Awards will confirm provisional bookings or schedule subsequent bookings.

Booking

Bookings can be made by providers via the EPA Section of Open Awards' Secure Portal. As per ESFA guidance, Open Awards requires at least three (3) months advance notice of the potential gateway date. However, training providers may make provisional bookings at any point following Open Awards acceptance of an apprentice registration.

Open Awards will endeavour to accept and schedule bookings for end-point assessment to meet the expressed preference dates of the employer wherever possible. However, any provisional booking cannot be confirmed or scheduled by Open Awards until gateway checks have been successfully completed.

Cancelling or rescheduling a booking

Provisional bookings can be re-scheduled or cancelled by providers via the EPA Section of Open Awards' Secure Portal. Confirmed bookings **up to 10 workings days** before the assessment day can be re-scheduled at no charge. Confirmed bookings cancelled or rescheduled with **less than 10 workings days'** notice will incur a charge in line with Open Awards fees policy².

Assessment plan version

Open Awards will undertake end-point assessment in line with the requirement of the current version of the assessment plan (version 1) or in line with IfATE directions. Training providers and employers must contact Open Awards to discuss any instance where they believe it is appropriate for assessment to be undertaken in line with a historic/ previous version of the assessment plan. Because Open Awards may need to liaise with either IfATE or the External Quality Assurance Provider to determine whether this is allowable, training providers and employers should be aware this may delay the ability of Open Awards to undertake end-point assessment until resolved.

Portfolio

The portfolio of evidence must:

- be compiled during the on-programme period of the apprenticeship
- contain evidence related to the KSBs assessed by assessment method 2: Vocational Competence Discussion supported by a portfolio of evidence
- typically contain 14 or more discrete pieces of evidence
- cover the 22 occupational duties outlined in the standard
- be submitted to Open Awards as one PDF document.

Evidence may be used to demonstrate more than one KSB. The document **ST0495-ECRS** (seen in Appendix x, pg. xx) can be downloaded from the Open Awards Secure Portal; this should be used to map on-programme evidence against the relevant KSB criteria demonstrated as set out in the standard. All KSB criteria should be demonstrated in the portfolio.

The portfolio will not be assessed by Open Awards, nor will Open Awards provide feedback on evidenced work, but will be used by the IEPA to prepare for the apprentice's interview.

The portfolio can be made up of a collection of evidence in a variety of formats, including written, audio and video. Sources may include:

- workplace documentation/records for tasks and projects that the apprentice has directly worked on, for example;
 - projects managed by the apprentice
 - o relevant workplace policies/procedures
- witness statements

² Available on the Open Awards Secure Portal https://portal.openawards.org.uk/Login.aspx

- annotated photographs
- GDPR and safeguarding compliant video clips (maximum total duration 10 minutes); the apprentice must be in view and identifiable
- annotated photographs of the apprentice carrying out relevant tasks
- reports, minutes, action logs
- observations by the apprentice's manager or mentor
- feedback (managers and peers)
- performance reviews.

Mock assessment activities are not considered acceptable evidence to be included within the portfolio.

Authenticity of apprenticeship work

The evidence provided must be valid and attributable to the apprentice. The portfolio of evidence must be submitted with a statement from the employer and apprentice confirming this (form **ST0495-PAS** in Appendix x, pg. xx).

Apprentices must submit their portfolio to their EPAO once the Gateway process has confirmed that the portfolio of evidence is complete and ready for submission. The EPA and the Vocational Competence Discussion will be based on this.

The Portfolio of Evidence (and other Gateway evidence requirements) must be received by the EPAO within 2 weeks of the Gateway process completion. This will trigger confirmation of the EPA process and the start date for the 14-week project work window and 16-week time limit for the entire EPA, during the gateway period.

Identification checks

Open Awards requires the apprentice to present photographic identification to an Open Awards invigilator or IEPA immediately prior to each assessment on each assessment day. This is a requirement to ensure Open Awards can confirm an individual completing an assessment is the person they are claiming to be.

The following are acceptable forms of evidence of an apprentice's identification:

- a valid passport (any nationality)
- · a signed UK photo card driving licence
- valid warrant card issued by HM Forces or the Police
- other photographic ID card, e.g., employee ID card (must be current
- employer), student ID card, travel card
- UK biometric residence permit.

Where this identification is not available to be checked, the assessment will not be allowed to commence.

Where an apprentice does not have access to the necessary identification or where the name on the identification does not match the name registered with Open Awards, the training provider must contact Open Awards to make arrangements for alternative or additional authentication checks to be made.

Data management

Open Awards has a responsibility under the Data Protection Act to ensure that learners and apprentices are informed of how their information is processed and shared.

Open Awards collects and processes personal learner information for the purpose of: registering learners and apprentices, and awarding learner and apprentice achievements; exercising its functions; and meeting its responsibilities, both statutory and otherwise.

Further information on the personal data and information shared with Open Awards and how we use it and who we share it with can be found in the Privacy Notice: Learner Information which is on the Open Awards website.

Whilst we endeavour to collect only that data for which there is a legal or sound business requirement and to ensure the integrity of the data, we strongly encourage customers to contact us if you believe any data to be incorrect.

Any concerns can be sent to Open Awards by emailing enquiries@openawards.org.uk

In compliance with ESFA Conditions for being on the register of end-point assessment organisations, Open Awards must retain information about the EPAs undertaken and payment received for six (6) years after the activity took place. This will include details of what assessments were undertaken, against which versions of the standard and assessment plan, when and by whom, along with assessment outcomes and evidence of the internal quality assurance of those assessments. Open Awards is also required to share end-point assessment information with the External Quality Assurance Provider to ensure they are able to undertake their regulatory role. The External Quality Assurance Provider for this standard is Ofqual.

For the purposes of the Data Protection Act and General Data Protection Regulation (GDPR) 2018, Open Awards is the data controller for personal information processed by the organisation.

<u>Assessment</u>

The EPA consists of two assessment methods which are individually graded.

- Assessment method 1: Workplace project (including a practical element that allows for the application and demonstration of skills in a real-life work context)
- Assessment method 2: Vocational Competence Discussion (supported by a portfolio of evidence).

Assessment preparation

Assessment specifications (Appendix 2) and assessment records (Appendices 3-8) are available to support training providers and employers post-gateway to ensure apprentices are well prepared for their EPA experience.

Order of assessment methods

The assessment methods can be delivered in any order. The result of one assessment method does not need to be known before starting the next.

Assessment window

The EPA must be completed over a maximum total assessment time of 14 weeks and one hour (i.e. 14 weeks for the Workplace Project and one hour Vocational Competence Discussion), within a 16-week period starting once the apprentice has met the Gateway requirements.

An individual EPA assessment re-sit/re-take (e.g. Vocational Competence Discussion and/or project) must be completed satisfactorily within six months of the end of the initial EPA period. After six months, apprentices must retake the entire EPA. The time limit for each method will start again and will remain as 16 weeks in total, 14 weeks for completion of the Workplace Project and 1 hour for the Vocational Competence Discussion, within a timescale agreed with the employer and Open Awards.

Assessment method 1: Workplace project (including a practical element that allows for the application and demonstration of skills in a real-life work context)

Overview

Apprentices will undertake the work-based project over 14 weeks and it will synoptically assess the apprentice's knowledge, skills and behaviours.

All project topics will be agreed in advance with Open Awards, the employer and the apprentice.

Projects must demonstrate competence against the application of the technical knowledge and skills of the specialist area, as well as the application of the following core areas of the standard:

- safe and professional working practices and keeping themselves and others safe
- contribute effectively to the delivery of engineering solutions, and delivering engineering solutions effectively
- working knowledge of problem solving, and use creative thinking and problemsolving techniques
- how teams work effectively, and collaborative working practice

The following behavioural aspects will also be covered as core:

- effective communicating and influencing
- act professionally
- promote and exhibit a self-disciplined, self-motivated and motivational approach to work
- works safely, collaboratively
- quality focused

The project can focus on an immediate or strategic long-term issue or opportunity and will contain the following (as a minimum):

- Executive summary
- Introduction and background
- Outline of the issue or opportunity
- Justification for the change
- Evidence of effective research
- Analysis of benefits and drawbacks including commercial, contractual and organisational etc.
- Analysis of risks
- Summary of the recommendations
- Consideration of legislation, regulation, industry and organisational policies, procedures and requirements
- Proposed plan for implementation and stakeholder engagement

The project is expected to draw together the learning from across the standard, including the ability to select and apply knowledge as well as identifying and interpreting complex sets of data, and presenting the proposed solution in an appropriate format. The written

report will be submitted for marking upon completion to Open Awards within 14 weeks of the workplace project brief being signed off by Open Awards.

Assessment method 2: Vocational Competence Discussion (supported by a portfolio of evidence)

Overview

The IEPA will complete a vocational competence discussion with the apprentice, assessing their knowledge skills and behaviour.

The vocational competence discussion will last 60 minutes with a +10% tolerance.

The independent assessor must ask the apprentice 7 open questions in the following areas as outlined in Annex B:

- Health and Safety
- Professional Working Practices
- · Scientific, technical, engineering, mathematical and design skills
- Quality and Continuous Improvement
- Team Working
- Recruitment and Retention
- Continuous Professional Development

One question will be asked per area, with follow up questions are allowed to seek clarification.

Apprentices may refer to their portfolio when answering the questions and will be given the opportunity to evaluate their portfolio during the discussion i.e. what went well, lessons learnt and recommendations for the future projects.

Assessment conditions

The vocational competence discussion will last 60 minutes with a +10% tolerance. The discussion must take place on a one-to-one basis with the apprentice, who should be given at least one weeks' notice of the assessment date. The vocational competence discussion must be carried out in a quiet room, free from distractions.

Apprentices may bring a copy of the portfolio with them and may refer to this when answering the questions.

Authenticity of apprenticeship work

The evidence provided must be valid and attributable to the apprentice. The Portfolio Evidence Record must contain a statement from the employer and apprentice confirming this (form **ST0495-PAS**).

What to avoid

The Portfolio Evidence Record should **not** include reflective accounts or any methods of self-assessment **unless** this is part of the KSB being assessed, i.e., a KSB criterion directly indicates reflective practice knowledge and/or skills. Any employer contributions should focus on direct observation of performance (for example witness statements) rather than opinions.

Vocational competence discussion

The apprentice and the IEPA will have a two-way dialogue, allowing the apprentice to evidence the KSBs assigned to this End-point assessment method in each key area of activity outlined in the apprenticeship standard and assessment plan. The IEPA will ask a minimum of 7 open questions.

The IEPA will draw on appropriate evidence from the apprentice's portfolio to underpin the discussion. The portfolio itself will not be assessed, but it must meet a minimum level of quality to enable the professional discussion to take place.

Preparing for the vocational competence discussion

The IEPA will conduct a thorough review of the apprentice's submitted portfolio of evidence in order to plan and structure the vocational competence discussion. To do this, IEPAs will draw on the training and guidance provided by Open Awards. IEPAs will also use a question bank prepared and maintained by Open Awards. The apprentice must be given at least **5 working days'** notice of the date and time of the vocational competence discussion.

Assessment conditions

The discussion will be undertaken on a one-to-one basis between the IEPA and the apprentice and last for **60 minutes**. However, the IEPA can increase the overall time by up to 10% (i.e., **6 minutes**), but only to allow the apprentice to complete the answer they are giving. The IEPA will **not** inform the apprentice whether they have additional time or how much additional time may be available. The apprentice should **not** assume that they will receive any additional time.

The discussion can and should be undertaken remotely through video conferencing (e.g., MS Teams or Zoom). Further details of this option are available from Open Awards.

As the vocational competence discussion only involves the apprentice and the IEPA, neither the employer nor provider are required to attend.

Grading

Mapping of KSBs against assessment methods

Appendix 1 shows each assessment method and the KSBs from the apprenticeship standard that are assessed by that method. Additionally, Appendix 2 and Appendices 3-8 detail the breakdown of the KSBs assessed in each of the key areas within each EPA method and their associated grading criteria.

Grading individual assessments

Apprentices must meet all the pass criteria to gain a pass for each End-point assessment method.

Apprentices must meet all the distinction criteria to gain a distinction for each End-point assessment method.

Aggregation of individual assessment grades into an overall grade

Performance in the EPA will determine the apprenticeship grade of fail, pass, or distinction.

Apprentices who fail one or more assessment method will be awarded an overall EPA 'fail'.

In order to gain an overall EPA 'pass', apprentices must achieve a pass in all the assessment methods.

To achieve an overall EPA 'distinction', apprentices must achieve distinction in all the assessment methods. Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole.

Assessment method 1 Workplace Project	Assessment method 2 Vocational Competence Discussion (supported by a portfolio of evidence)	Overall grading
Fail	Fail	Fail
Fail	Pass	Fail
Pass	Fail	Fail
Pass	Pass	Pass
Pass	Merit	Pass
Merit	Fail	Fail
Merit	Pass	Pass
Merit	Merit	Merit
Merit	Distinction	Merit
Fail	Distinction	Fail
Pass	Distinction	Pass
Distinction	Fail	Fail
Distinction	Pass	Pass
Distinction	Merit	Merit

Distinction	Distinction	Distinction
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Reasonable adjustments and Special considerations

Open Awards is committed to ensuring access to fair assessment for all learners and to protecting the integrity of assessments and qualifications.

There may be circumstances whereby arrangements need to be made to take account of particular learners' requirements in order to ensure that this is achieved without giving any unfair advantage over other learners.

The Reasonable Adjustments and Special Considerations Policy and Procedures, sets out the principles which should be followed when making decisions about adjustments to assessment. It outlines Open Awards' reasonable steps to ensure it avoids disadvantage (directly or indirectly) in line with the requirements of The Equality Act 2010 (Disability) Regulations 2010. The policy and procedures are accessible through the Open Awards Secure Portal.

Reasonable adjustments

Any action that helps to reduce the effect of a disability or difficulty that places a learner at a substantial disadvantage in the assessment situation. Reasonable adjustments are adjustments made to an assessment for a qualification so as to enable a disabled learner to demonstrate his or her knowledge, skills and understanding to the levels of attainment required by the specification for that qualification.

Reasonable adjustments must not affect the reliability or validity of the assessment outcomes but may involve:

- changing the usual assessment arrangements, e.g., allowing a learner extra time to complete an assessment activity
- adapting assessment materials e.g., by providing large print or providing materials in Braille
- providing assistance during an assessment e.g., by providing a trained signer, interpreter or a reader
- changing the assessment method e.g., from a written assessment to a spoken assessment
- using assisted technology such as screen reading or a voice activated software.

Reasonable adjustments must be approved and set in place before the assessment takes place. The work produced by the learner will be assessed in the same way as all other learners.

Where the employer and training provider believe reasonable adjustment(s) may be required, this can be identified at the registration stage. Open Awards requires a

minimum of 90 days' notice of any request for reasonable adjustments so this can be considered and where approved, arrangements made.

Special considerations

Adjustments which may be applied after an assessment where the learner has encountered exceptional circumstances that have disadvantaged them during their assessment.

The assessment plan for the apprenticeship standard defines permissible special considerations and the circumstances surrounding the apprentice's End-point assessment that fall within this definition.

Cancellations or rescheduled assessments

Cancellation by the apprentice, training provider or employer

Provisional bookings can be re-scheduled or cancelled at no charge. Confirmed bookings can be re-scheduled at no charge **up to 10 workings days** before the assessment day.

Confirmed bookings cancelled or re-scheduled with **less than 10 workings days'** notice will incur relevant costs associated to the booking.

The 5% apprentice registration fee is non-refundable regardless of withdrawal date.

Cancellation by Open Awards

In the unlikely event that a confirmed booking has to be cancelled by Open Awards, it will be rescheduled as soon as possible for a mutually convenient time. There will be no additional charges associated with the rescheduled assessment.

Confirmation of results

Assessment results will be made available to providers via the EPA Section of Open Awards' Secure Portal. Results of assessment will normally be provided to the training provider within 10 working days of the assessment being undertaken

Resits and Retakes

Open Awards provides resit and retake opportunities in line with ESFA requirements unless the assessment plan associated with the apprenticeship contains alternative requirements.

Apprentices who fail one or more assessment method will be offered the opportunity to take a resit or a retake. Open Awards will provide feedback alongside the result notification to all apprentices who fail an assessment method. This feedback will be provided via the training provider, normally **within 10 workings days** of the assessment taking place.

Where the result notification suggests a retake may be appropriate, the ESFA recommend the employer and training provider consider a supportive action plan that responds to the performance weaknesses identified within the feedback. This action plan should clearly state the nature and extent of the re-training and include the estimated time to prepare the apprentice for the retake. When a retake is booked, Open Awards will require confirmation from the training provider that the apprentice has received further training and is ready to be assessed.

A resit involves the apprentice attempting one or more failed assessment components again, without the need to undertake further training.

Open Awards normally require a **minimum of 10 workings days**' notice when booking a resit or a retake.

The number of resits and retakes that can be taken by an apprentice will normally be at the discretion of the employer. The ESFA recommends a limit of two (2) resits or retakes, however, more than two (2) resits or retakes may be taken if available, or unless otherwise specified or limited within the assessment plan.

Resits or retakes are only to be taken in the event of a failure. A resit or retake cannot be taken with the intention of increasing the original grade if an apprentice has passed their EPA. Therefore, feedback will not normally be provided to apprentices who achieve a pass or higher.

The maximum grade that can be achieved for a resit or retake is a pass, unless Open Awards has determined there are exceptional circumstances. Where an apprentice believes exceptional circumstances impacted on their initial assessment attempt, they must submit a formal request with supporting evidence for exceptional circumstances to

be considered, directly to Open Awards within five (5) working days of receiving the assessment decision.

The same IEPA who undertook the initial assessment attempt may be allocated by Open Awards to assess an apprentice's resit or retake. This may be a requirement of the assessment plan. The allocation of IEPAs to assessments will be taken by Open Awards based upon the requirements of the assessment plan or operational considerations.

An individual EPA assessment re-sit/re-take (e.g. Vocational Competence Discussion and/or project) must be completed satisfactorily within six months of the end of the initial EPA period. After six months, apprentices must retake the entire EPA. The time limit for each method will start again and will remain as 16 weeks in total, 14 weeks for completion of the Workplace Project and 1 hour for the Vocational Competence Discussion, within a timescale agreed with the employer and Open Awards.

Appeals and Complaints

Open Awards is committed to ensuring that all assessment decisions are consistent, fair and based on valid judgements made by independent IEPAs.

If an apprentice is satisfied with their result but seeks information as to why a specific grade was awarded, they can request formal feedback through their training provider. This feedback will be limited to justification of the decision and will not be developmental in nature (i.e., indicate how they may have achieved a higher grade). This feedback may take **up to 20 working days** to be provided. Further details are available from Open Awards.

If an apprentice is not satisfied with their result, they can request an enquiry about results which is an informal appeal. Open Awards will review the documentation for administrative errors and correct these if identified. An enquiry about results must be made by the apprentice **within 10 working days** of notification of the results concerned.

Alternatively, or subsequent to an enquiry about results, if an apprentice is not satisfied with their result, they may lodge an appeal. Appeals can be made by the training provider on behalf of the apprentice, but they must have the permission of the apprentice to do this.

Appeals made in respect of the final overall grade will result in a delay to the completion certificate being requested by Open Awards. For further details regarding the process, timelines and fees, please refer to Open Awards' Enquiries and Appeals Policy and Procedures which can be found on the Portal.

Completion and certification

Open Awards will issue a summary of results following successful completion of all EPA assessments. This will be issued to the apprentice via the provider and show the grade associated with each assessment, alongside the overall grade and the date this was awarded.

Open Awards will also request the apprenticeship completion certificate from the IfATE on behalf on an apprentice once they have completed their apprenticeship. As part of the gateway declaration form an apprentice is required to give Open Awards permission to do this on their behalf. Without this permission Open Awards is unable to claim the certificate.

Open Awards will request the certificate once the apprentice has received and agreed the final grade. Where the apprentice does not formally agree the final grade, Open Awards will assume it is agreed once the window for an enquiry about results or appeal is extinguished (10 working days from the notification of results). Requests for the certificate are then made within 20 working days and in most instances, sooner. If ATE normally send the completion certificate directly to the employer by recorded delivery; this can take up to 15 working days to arrive from the date it is requested.

Quality assurance

Internal quality assurance

Quality assurance is at the heart of Open Awards' practices and we follow suitably rigorous processes to ensure that the integrity of our assessments is maintained.

Internal quality assurance is the process of reviewing and evaluating assessment practices and decisions to ensure that:

- an identified individual is responsible for coordinating internal quality assurance processes
- there are clear and documented roles and responsibilities for all those involved
- all learners are assessed accurately, fairly and consistently to the right standard
- internal quality assurance is structured and incorporates all of the requirements set out in the assessment plan associated with the apprenticeship standard
- assessment tasks and learner work are sampled appropriately
- good practice is promoted through internal standardisation events and quality assurance meetings
- decisions are supported by full and clear records and action plans that are followed
- internal processes are transparent and regularly evaluated.

External quality assurance

External quality assurance for this apprenticeship standard is undertaken by Ofqual.

Maladministration and Malpractice

Maladministration is defined as any activity, neglect, default or other practice that results in an apprentice, training provider or employer not complying with the specified requirements for delivery of end-point assessment.

Malpractice is any act, default or practice which:

- compromises, attempts to compromise, or may compromise, the process of assessment/ examinations, the integrity of any end-point assessment activity or the validity of an assessment result or certificate, including maladministration
- damages the authority, reputation or credibility of Open Awards or any officer or employee

• involves a failure by an apprentice, training provider or employer to provide Open Awards with such necessary information as required to enable it to investigate allegations of suspected malpractice also constitutes malpractice.

An apprentice, training provider or employer must report any allegation of suspected malpractice/ maladministration to Open Awards. Failure to report allegations of malpractice/ maladministration can lead to assessment results not being conferred and certification claims not being processed, and future registrations not being accepted.

Further information is available within Open Awards' Malpractice and Maladministration Policy and Procedures, including how Open Awards will manage alleged or suspected malpractice or maladministration.

Where Open Awards is satisfied on the balance of probabilities that an allegation is substantiated, it reserves the right to impose a range of sanctions on an apprentice and/ or training provider and/ or an employer, depending on the seriousness of the situation and the risk to the interests of learners and the integrity of the end-point assessment and the effect on public confidence in Open Awards. Further information can be found within Open Awards' Sanctions Policy.

Open Awards will ensure that in most cases alleged malpractice is kept confidential between itself and those directly impacted. However, in cases of serious malpractice, Open Awards may exchange information with the regulators, other end-point assessment organisations and other appropriate authorities.

Open Awards Policies and Procedures

Current versions of the following Open Awards policies and procedures, relevant to end point assessment are accessible to training providers through the Secure Portal. Employers and apprentices can obtain copies from the relevant training provider, or can be obtained directly by contacting Open Awards.

- End Point Assessment Pricing Policy
- Reasonable Adjustments and Special Considerations Policy
- Data protection
- Enquiries and Appeals Policy and Procedures
- Complaints Policy
- Malpractice and Maladministration Policy and Procedures
- Equality and Diversity Policy
- Sanctions Policy
- Safeguarding Policy
- Conflict of Interest Policy
- Fair Access policy

In addition, the current version of the following relevant document may be obtained by training providers, employers or apprentices by contacting Open Awards directly:

Instructions for Conducting Controlled Assessment Remotely

Open Awards recommends that local copies of policies and procedures are not made and referred to as these may not be current.

Fees and Charges

Open Awards standard fees and charges for end-point assessment, including resists and retakes are set out in the schedule of fees. The current schedule can be found on the Open Awards' website.

Support

The Open Awards website <u>www.openawards.org.uk</u> is the best source for general information with full listings of our qualifications, news, events, assessment information, policies, and details of our support services.

In addition, our experienced customer service team can be contacted on 0151 494 2072 or via email enquiries@openawards.org.uk.

Glossary

Assessment	The process of making judgements about the level of occupational proficiency an apprentice can demonstrate when measured against the knowledge, skills and behaviours set out in the standard.
Assessment Criteria	Assessment criteria describe what a learner should be able to do in order to demonstrate competence (i.e., pass).
Authentic	Evidence must be the apprentice's own work.
Completion certificate	The certificate issued by IfATE which demonstrates an apprentice has successfully completed their apprenticeship.
Diversity	Acknowledging that each individual is unique and recognising individual differences, e.g., culture, ability, gender, race, religion, wealth, sexual orientation, or any other individual characteristic.
EQA	External Quality Assurance.
Equality	Fair treatment for all regardless of differences, e.g., culture, wealth, race, gender, ability, sexual orientation or any other group characteristic.
Evidence	How an apprentice demonstrates knowledge, skills or behaviour that can be used to make a judgment of achievement against criteria.
Fair	Ensuring that everyone has an equal chance of getting an objective and accurate assessment.
Gateway	The point at which the employer decides the apprentice is occupationally competent and ready to undertake end-point assessment.
Holistic	Holistic assessment is identifying how evidence can relate to and be cross referenced to other units rather than taking a unit by unit approach.
Independent assessment	Assessment decisions made by an IEPA and end-point assessment organisation who have no relationship with the apprentice, training provide or employer and therefore, have no interest in the assessment result.
Independent end-point assessor (IEPA)	The individual recruited and trained by the Awarding Organisation who assesses the apprentice during end-point assessment.
IQA	Internal Quality Assurance.
Learning Outcomes	Learning outcomes describe what an apprentice should know and understand by the end of a unit.

Reliable	Reliable evidence indicates that the apprentice can consistently perform at this level. A reliable method of assessment will produce consistent results for different IEPAs at each assessment.
Simulation	Where simulation is allowed it must replicate working activities in a realistic workplace environment. A realistic working environment is one which replicates what is likely to happen when an individual is carrying out their normal duties and activities at their employer's premises.
Sufficient	Enough evidence as specified in Evidence Requirements or Assessment Strategy.
Valid	Evidence must be relevant to the learning outcome and assessment criteria i.e., capable of measuring the knowledge or skills in question. For example, a written test cannot measure a candidate IEPA's ability to provide feedback to learners.
XAMS	The Open Awards platform used for online assessments and tests.

Appendix 1 Map of KSBs against assessment methods

Method 1: Workplace project

KSBs	Apprenticeship standard descriptor (Knowledge)
C/K1	Safe and Professional working practices
C/K2	The scientific, technical, engineering, mathematical and design principles
C/K3	How to contribute effectively to the delivery of rail specific engineering solutions
C/K4	How strategic decisions are made
C/K5	Problem solving and continuous improvement
C/K8	Approaches to partner, stakeholder and supplier relationship management within the rail industry
KSBs	Apprenticeship standard descriptor (skills)
0/04	
C/S1	Keep themselves and others safe
C/S1 C/S2	Apply a range of technical skill sets
	· '
C/S2	Apply a range of technical skill sets
C/S2 C/S3	Apply a range of technical skill sets Deliver Rail & Rail Systems Engineering solutions effectively Provide input to technical, business planning, finance and commercial meetings
C/S2 C/S3 C/S4	Apply a range of technical skill sets Deliver Rail & Rail Systems Engineering solutions effectively Provide input to technical, business planning, finance and commercial
C/S2 C/S3 C/S4	Apply a range of technical skill sets Deliver Rail & Rail Systems Engineering solutions effectively Provide input to technical, business planning, finance and commercial meetings Use creative thinking and problem solving techniques Lead and support single discipline teams
C/S2 C/S3 C/S4 C/S5 C/S6	Apply a range of technical skill sets Deliver Rail & Rail Systems Engineering solutions effectively Provide input to technical, business planning, finance and commercial meetings Use creative thinking and problem solving techniques
C/S2 C/S3 C/S4 C/S5 C/S6	Apply a range of technical skill sets Deliver Rail & Rail Systems Engineering solutions effectively Provide input to technical, business planning, finance and commercial meetings Use creative thinking and problem solving techniques Lead and support single discipline teams Manage relationships with a range of stakeholders
C/S2 C/S3 C/S4 C/S5 C/S6 C/S7	Apply a range of technical skill sets Deliver Rail & Rail Systems Engineering solutions effectively Provide input to technical, business planning, finance and commercial meetings Use creative thinking and problem solving techniques Lead and support single discipline teams Manage relationships with a range of stakeholders Apprenticeship standard descriptor (behaviours)

Rail Civils	Rail Civils Specialist Knowledge		
RC/K1	The requirements, methods and techniques for the installation and maintenance of the track support and track foundation		
RC/K2	The impact of the railway environment e.g. geotechnics, structures, tunnels, embankments, vegetation and drainage.		
Rail Civils	Rail Civils Specialist Skills		
RC/S1	Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business.		
RC/S2	Support and provide advice to colleagues within the Rail Civils discipline only.		

Track Sp	ecialist Knowledge
T/K1	Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations.
T/K2	The influences on track layouts from particular aspects of the railway environment, e.g. geotechnical, tunnels, embankments, and drainage.
Track Sp	ecialist Skills
T/S1	Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.
T/S2	Support and provide advice to colleagues within the Track discipline only.

Signalling	and Control Systems Specialist Knowledge		
SC/K1	The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection.		
SC/K2	Rules for the operational interfaces of the railway.		
Signalling	Signalling and Control Systems Specialist Skills		
SC/S1	Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs.		
SC/S2	Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches.		

Rail Syste	ems Integration Specialist Knowledge	
RS/K1	The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes	
Rail Systems Integration Specialist Skills		
RS/S1	Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.	
RS/S2	Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.	

Traction a	and Rolling Stock Specialist Knowledge
TRS/K1	The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle
TRS/K2	The design principles used in legacy and modern rolling stock types and their rolling stock sub-systems across or within their T&RS engineering

	subject matter area(s) (which may be discipline based – e.g. Mechanical, electrical, electronic, etc. or system based – e.g. Structures, Doors, Brakes, traction, Wheel/Rail interface, etc. or a mix of both).
Traction a	and Rolling Stock Specialist Skills
TRS/S1	Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.

Telecoms	, Networks and Digital Specialist Knowledge
TND/K1	The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)
TND/K2	The operating principles in legacy or modern rail telecommunication technologies (e.g. Rail traffic management systems)
Telecoms	s, Networks and Digital Specialist Skills
TND/S1	Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.

Electrical	, Mechanical or Building Services Specialist Knowledge
EMB/K1	Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment
EMB/K2	High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis.
EMB/K3	Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems)
Electrical	, Mechanical or Building Supplies Specialist Skills
EMB/S1	Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge.

End-point Assessment Method 2: Vocational Competence Discussion (supported by a portfolio of evidence)

KSBs	Apprenticeship standard descriptor (knowledge)
C/K1	Safe and Professional working practices
C/K2	The scientific, technical, engineering, mathematical and design principles
C/K6	How teams work effectively
C/K7	How to attract, recruit, develop and retain people
KSBs	Apprenticeship standard descriptor (behaviours)
B1	Communication and influencing skills
B2	Professionalism
B3	A self-disciplined, self-motivated and motivational approach to work
B4	Safe working practice
B5	Collaborative working
B7	Continuous Professional Development

Rail Civils	Specialist Knowledge
RC/K1	The requirements, methods and techniques for the installation and maintenance of the track support and track foundation
RC/K2	The impact of the railway environment e.g. geotechnics, structures, tunnels, embankments, vegetation and drainage.
Rail Civils	Specialist Skills
RC/S1	Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business.
RC/S2	Support and provide advice to colleagues within the Rail Civils discipline only.

Track Spe	ecialist Knowledge
T/K1	Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations.
T/K2	The influences on track layouts from particular aspects of the railway environment, e.g. geotechnical, tunnels, embankments, and drainage.
Track Spe	ecialist Skills
T/S1	Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.
T/S2	Support and provide advice to colleagues within the Track discipline only.

Signalling	and Control Systems Specialist Knowledge
SC/K1	The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection.
SC/K2	Rules for the operational interfaces of the railway.
Signalling	and Control Systems Specialist Skills
SC/S1	Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs.
SC/S2	Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches.

Rail Syste	ems Integration Specialist Knowledge	
	The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes	
Rail Syste	Rail Systems Integration Specialist Skills	
RS/S1	Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.	
RS/S2	Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.	

Traction and Rolling Stock Specialist Knowledge	
TRS/K1	The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle
TRS/K2	The design principles used in legacy and modern rolling stock types and their rolling stock sub-systems across or within their T&RS engineering subject matter area(s) (which may be discipline based – e.g. Mechanical, electrical, electronic, etc. or system based – e.g. Structures, Doors, Brakes, traction, Wheel/Rail interface, etc. or a mix of both).
Traction and Rolling Stock Specialist Skills	

TRS/S1	Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.
	maintenance and disposal.

Telecoms	, Networks and Digital Specialist Knowledge
TND/K1	The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)
TND/K2	The operating principles in legacy or modern rail telecommunication technologies (e.g. Rail traffic management systems)
Telecoms	s, Networks and Digital Specialist Skills
TND/S1	Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.

Electrical, Mechanical or Building Services Specialist Knowledge	
EMB/K1	Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment
EMB/K2	High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis.
EMB/K3	Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems)
Electrical, Mechanical or Building Supplies Specialist Skills	
EMB/S1	Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge.

Appendix 2 Assessment Specifications

	place Project (including a practical element that tion and demonstration of skills in a real-life work	veeks, post-gateway
Workplace Project		
Key Area	KSB coverage	Grading criteria
HEALTH & SAFETY Core:	C/K1. Safe and Professional working practices C/S1. Keep themselves and others safe	Pass: Keep themselves and others safe by working safely, showing professional working practices.
	B4. Safe working practice	Pass: Comply with workplace health, safety
Specialisms:		& environmental practices and regulations,
Rail Civils (RC)	RC/K1 The requirements, methods and techniques for the installation and maintenance of the track support and track foundation. RC/K2 The impact of the railway environment e.g. geotechnics, structures, tunnels, embankments, vegetation and drainage.	maintaining a safe and secure working environment including rail specific legislation, regulation (e.g. Common Safety Method Risk Assessment (CSM RA)).
Track (T)	T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations.	Pass: Comply with company practices, processes and procedures associated with safety in rail-related work and rail equipment.
	T/S1 Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.	Pass: Challenge unsafe practice and is proactive in resolving those practices.
Signalling and Control Systems (SC)	SC/K1 The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection. SC/S1	Pass: Undertake and document risk assessments and hazard reviews in accordance with company procedures.
(30)	Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs.	Pass: Receptive to the needs and concerns of others, especially where related to
Rail Systems Integration (RS)	RS/K1 The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes.	diversity and equality and exercises responsibilities in an ethical manner.
integration (ito)	RS/S1 Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.	Pass : Applies a safety first approach for themselves and colleagues; keeps themselves and others safe.

Traction and Rolling Stock (TRS)	TRS/K1 The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle. TRS/S1 Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.	
Telecoms, Networks and Digital (TND)	TND/K1 The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems) TND/S1 Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.	
Electrical, Mechanical or Building Services (EMB)	EMB/K1 Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment EMB/K2 High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis. EMB/S1 Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge.	
SCIENTIFIC, TECHNICAL, ENGINEERING, MATHEMATICAL and DESIGN SKILLS, AND DELIVERY OF RAIL SPECIFIC ENGINEERING SOLUTIONS	C/K1. Safe and Professional working practices C/K2. The scientific, technical, engineering, mathematical and design principles C/K3. How to contribute effectively to the delivery of rail specific engineering solutions C/S1. Keep themselves and others safe C/S2. Apply a range of technical skill sets	Pass: Use at least three forms of scientific, technical, mathematical and design skills in the project work submitted, cognisant of industry procedures, safety and quality requirements, risk and environmental impacts. These should be meaningfully applied, with their role in establishing the solution clearly explained.
Specialisms:	B4. Safe working practice	Pass: The scientific, technical, engineering, mathematical of design skills appropriate to the

Rail Civils (RC) Track (T) Signalling and (SC) **Rail Systems**

RC/K1

The requirements, methods and techniques for the installation and maintenance of the track support and track foundation.

RC/S1

Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business.

T/K1

Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations.

T/K2 The influences on track layouts from particular aspects of the railway environment, e.g. geotechnical, tunnels, embankments, and drainage.

T/S1

Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.

SC/K1

Control Systems

The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection. SC/S1

Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs.

RS/K1

The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes.

Integration (RS)

Traction and Rolling

Stock (TRS)

RS/S2

Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.

TRS/K1

The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle.

TRS/S1

Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.

specialism and the nature of the solution should be evidenced as being considered and dismissed or considered and applied. Supporting justification of the decisions must be present.

Distinction: Demonstrates a broad and deep understanding of the range of skills available by explaining why some are more appropriate and applicable than others citing appropriate criteria used to inform decisions taken.

Distinction: Provides evidence of anticipated technology changes and changes to rail network or systems thinking that will result in changes to business operating processes and/or procedures, showing an awareness of how different solutions may be available in future.

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Telecoms, Networks and Digital (TND)

TND/K1

The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)

TND/K2

The operating principles in legacy or modern rail telecommunication technologies (e.g. Rail traffic management systems)

TND/S1

Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.

EMB/K1

Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment

EMB/K2

High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis. EMB/K3

Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems) EMB/S1

Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge

Mechanical or Building Services (EMB)

Electrical,

PROBLEM SOLVING	C/K3. How to contribute effectively to the delivery of rail specific engineering solutions	Pass: Demonstrates how obstacles or
AND CREATIVITY	C/K5. Problem solving and continuous improvement	challenges are overcome in establishing the
	C/S3. Deliver Rail & Rail Systems Engineering solutions effectively	final solution.
	C/S5. Use creative thinking and problem-solving techniques	
Core:	RC/K1 The requirements, methods and techniques for the installation and	Pass: Demonstrates creative thinking and how
	maintenance of the track support and track foundation.	creativity will be managed and controlled,
	RC/S1 Apply rail civil engineering skills e.g. structural gauging to support the effective	showing how safety, performance and delivery
	performance and operation of the business	are enhanced or secured rather than put at
	T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces,	risk.
	requirements/ methods/techniques for installation and maintenance of track and	
	foundations.	Pass: Applies project management principles,
Specialisms	T/K2 The influences on track layouts from particular aspects of the railway	asset, risk and quality management and
Specialisms: Rail Civils (RC)	environment, e.g. geotechnical, tunnels, embankments, and drainage. T/S2 Support and provide advice to colleagues within the Track discipline only	assurance systems, processes and techniques.
Rail Civils (RC)	SC/K1 The requirements, methods and techniques for safe routing, spacing and	techniques.
	control of trains e.g. degraded mode, fixed block signalling, and automatic train	
	protection.	
	SC/K2 Rules for the operational interfaces of the railway.	
	SC/S2 Produce rail signalling and control solutions for the railway industry based on	
	known and defined concepts and principles and new and novel approaches.	
Track (T)	RS/K1 The end to end process for Rail Systems Integration e.g. requirements	
	management, project interface management, safety in the railway system, assurance	
	processes.	
	RS/S1 Take responsibility for assisting in the management and development of	
	integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.	
	RS/S2 Undertake systems integration engineering skills to manage project	
	requirements e.g. use requirements software to identify conflicts.	
Signalling and Control	TRS/K1 The design and application of Traction & Rolling Stock (T&RS) engineering	
Systems (SC)	systems and the various generic types of legacy or modern rolling stock across the	
	whole lifecycle.	
	TRS/S1 Provide engineering input in their chosen specialist area(s) in the context of	
	rolling stock design, application, alteration, configuration, operation, maintenance and	
	disposal.	
Doil Systems	TND/K1 The application of telecommunication engineering systems e.g. mobile	
Rail Systems Integration (RS)	networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)	
integration (No)	TND/K2 The operating principles in legacy or modern rail telecommunication	
	technologies (e.g. Rail traffic management systems)	
	TND/S1 Support telecommunication, network and digital engineering design,	
	application, configuration, operation, maintenance or decommissioning and disposal.	
	EMB/K1 Thermal imaging, electrical clearance, wiring, bonding and construction	
Traction and Rolling	processes relating to rail equipment	
Stock (TRS)	EMB/K2 High and low voltage distribution systems, earthing and bonding, isolation	
	and switching, protection and control systems, power generation and circuit analysis.	
	EMB/K3 Electrical (e.g. low voltage distribution systems, emergency power supply	
	systems) and mechanical (e.g. heating, ventilation, water, gas supply systems) EMB/S1	
Telecoms, Networks	Undertake standards review, operational practice, approvals and assessment of	
and Digital (TND)	relevant asset types in line with technical knowledge of 78	
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Key Area	KSB coverage	Grading criteria
COMMUNICATION	C/K2. The scientific, technical, engineering, mathematical and design principles	Pass: Communicates the design and delivery
Core:	C/K3. How to contribute effectively to the delivery of rail specific engineering solutions	needs and the solution showing how sustainable business benefits have been
	C/K4. How strategic decisions are made	delivered.
	C/K5. Problem solving and continuous improvement	Pass: Ensure all aspects of the work project will be feasible, supported by reasoned and
	C/K8. Approaches to partner, stakeholder and supplier relationship management within the rail industry C/S2. Apply a range of technical skill sets	informed argument, based on realistic and practical considerations, making the design, delivery and solution a viable option.
	C/S3. Deliver Rail & Rail Systems Engineering solutions effectively	Pass: Produce work project which
	C/S4. Provide input to technical, business planning, finance and commercial meetings C/S5. Use creative thinking and problem solving techniques	demonstrates a consistent, reasoned and evidenced-based approach that is presented in a way that is logical and straightforward to
	RC/K1	follow.
	The requirements, methods and techniques for the installation and maintenance of the track support and track foundation. RC/S1	Distinction: Provide an evidence-based argument using ideas and techniques that are
Specialisms:	Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business.	at the forefront of the sector.
Rail Civils (RC)	T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations. T/K2 The influences on track layouts from particular aspects of the railway	Distinction: Present a solution that demonstrates insight and shows an appreciation of both the need and the company's ability to respond to the need and benefit from the solution.
	environment, e.g. geotechnical, tunnels, embankments, and drainage.	Distinction: Develop a persuasive and
Track (T)	T/S1 Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.	convincing argument based on insight and command of the subject matter.
	SC/K1 The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection. SC/K2 Rules for the operational interfaces of the railway. SC/S2	Distinction: Produce project recommendations identifying realistic changes that have the potential to impact the wider industry and/or society.
	Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches.	

Signalling and Control Systems (SC)

RS/K1

The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes. RS/S1

Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.

RS/S2

Rail Systems Integration (RS)

Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.

TRS/K1

The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle.

TRS/S1

Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.

TND/K1

Traction and Rolling Stock (TRS)

The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)

TND/K2

The operating principles in legacy or modern rail telecommunication technologies (e.g. Rail traffic management systems)

TND/S1

Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.

EMB/K1

Telecoms, Networks and Digital (TND)

Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment

EMB/K2

High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis. EMB/K3

Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems) EMB/S1

	Undertake standards review, operational practice, approvals and assessment of	
Electrical, Mechanical or Building Services (EMB)	relevant asset types in line with technical knowledge.	
QUALITY CONTROL AND ASSURANCE		Pass: Incorporate design, process of development and the solution which are
Core:		supported by an approach to quality that
	B6. A focus on quality	distinguishes between control and assurance
Specialisms:	RC/K1	and that is supported by evidence justifying the
	The requirements, methods and techniques for the installation and maintenance of	choices made.
D !! 0: !! (D0)	the track support and track foundation.	5 5
Rail Civils (RC)	RC/S1	Pass: Demonstrates compliance with
	Apply rail civil engineering skills e.g. structural gauging to support the effective	corporate policies including sustainability, ethics, equality and diversity, and how to
	performance and operation of the business. RC/S2	constructively challenge non-compliance.
	Support and provide advice to colleagues within the Rail Civils discipline only.	constructively challenge non compliance.
	T/K1	Pass: Demonstrate safety, quality of outcome
	Rail track geometry requirements, effects of speed, wheel/rail interfaces,	and performance of solution considerations
Track (T)	requirements/ methods/techniques for installation and maintenance of track and	that are used as factors in influencing
	foundations.	decisions about quality control and assurance
	T/K2 The influences on track layouts from particular aspects of the railway	
	environment, e.g. geotechnical, tunnels, embankments, and drainage.	
	T/S2	
	Support and provide advice to colleagues within the Track discipline only.	
	SC/K1	
	The requirements, methods and techniques for safe routing, spacing and control of	
	trains e.g. degraded mode, fixed block signalling, and automatic train protection.	
Signalling and Control	SC/K2	
Systems (SC)	Rules for the operational interfaces of the railway.	
(22)	SC/S2 Produce rail signalling and central colutions for the railway industry based on known	
	Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches.	
	RS/K1	
	The end to end process for Rail Systems Integration e.g. requirements management,	
	project interface management, safety in the railway system, assurance processes	
	RS/S2	
Dail Systems	Undertake systems integration engineering skills to manage project requirements e.g.	
Rail Systems	use requirements software to identify conflicts.	
Integration (RS)	TRS/K1	

	The design and application of Traction & Rolling Stock (T&RS) engineering systems	
	and the various generic types of legacy or modern rolling stock across the whole lifecycle.	
Traction and Rolling Stock (TRS)	TRS/S1 Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.	
Telecoms, Networks	TND/K1 The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)	
and Digital (TND)	TND/S1 Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.	
	EMB/K1 Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment EMB/K2 High and low voltage distribution systems, earthing and bonding, isolation and	
Electrical, Mechanical or Building Services (EMB)	switching, protection and control systems, power generation and circuit analysis. EMB/K3 Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems) EMB/S1	
	Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge	
STAKEHOLDER RELATIONSHIPS Core:	C/K8. Approaches to partner, stakeholder and supplier relationship management within the rail industry	Pass: Demonstrate an approach to stakeholder engagement that is built on professional working relationships and is clear about when, what and how information needs to be communicated to secure the necessary
	C/S7. Manage relationships with a range of stakeholders	stakeholder support.
		Pass: Demonstrates the need to engage internal as well as external stakeholders, and describes how they will deal with supply chain,

	B5. Collaborative working	contractor and any other stakeholders
	g	necessary for the successful implementation of
		the solution within their specialist area.
PROFESSIONALISM	C/K8. Approaches to partner, stakeholder and supplier relationship management	Pass: Demonstrate a level of autonomy, which
AND	within the rail industry	shows the ability to plan, organise, carry out
COLLABORATION		work to plan, time and resource, knowing when
Core:		to collaborate and consult.
Specialisms:	RC/S2	Pass: Take steps to reassure those dependent
Rail Civils (RC)	Support and provide advice to colleagues within the Rail Civils discipline only.	on them and their inputs and outputs.
Track (T)	T/S2	
Olamallia a sur l Oraci	Support and provide advice to colleagues within the Track discipline only.	Distinction: Demonstrate a high degree of
Signalling and Control	SC/S2	autonomy and their work and collaborative
Systems (SC)	Produce rail signalling and control solutions for the railway industry based on known	efforts reflect positively on their profession / occupation, their employer and the rail
	and defined concepts and principles and new and novel approaches.	industry.
Rail Systems	RS/S1	madsiry.
Integration (RS)	Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability,	
	performance, efficiency and maintainability of the railway.	
	TRS/S1	
Traction and Rolling	Provide engineering input in their chosen specialist area(s) in the context of rolling	
Stock (TRS)	stock design, application, alteration, configuration, operation, maintenance and	
	disposal.	
Telecoms, Networks	TND/S1	1
and Digital (TND)	Support telecommunication, network and digital engineering design, application,	
Floatsiaal March	configuration, operation, maintenance or decommissioning and disposal.	
Electrical, Mechanical	EMB/S1	
or Building Services	Undertake standards review, operational practice, approvals and assessment of	
(EMB)	relevant asset types in line with technical knowledge.	
DECISION MAKING	C/K4. How strategic decisions are made	Pass: Demonstrate self-discipline and
Core:		collaboration recognising the limits of their
	B4. Safe working practice	authority and how and when to involve others
Specialisms:	RC/S2	in decisions.
Rail Civils (RC)	Support and provide advice to colleagues within the Rail Civils discipline only.	
	- Support and provide device to concegued within the Itali Givin discipline Only.	

	T/S2	Distinction: Demonstrate collaboration that
Track (T)	Support and provide advice to colleagues within the Track discipline only.	shows consultation across a range of
Signalling and Control	SC/S2 Produce rail signalling and control solutions for the railway industry based on known	stakeholders to inform strategic decision making, both at an individual and collective
Systems (SC)	and defined concepts and principles and new and novel approaches.	level.
Cyclems (CC)	RS/S1	
	Take responsibility for assisting in the management and development of integrated	
Rail Systems	designs that shall maintain or improve on the existing safety, reliability, capability,	
Integration (RS)	performance, efficiency and maintainability of the railway.	
	TRS/S1	
	Provide engineering input in their chosen specialist area(s) in the context of rolling	
Traction and Rolling	stock design, application, alteration, configuration, operation, maintenance and	
Stock (TRS)	disposal.	
Telecoms, Networks and Digital (TND)	TND/S1	
and Digital (TND)	Support telecommunication, network and digital engineering design, application,	
Electrical, Mechanical	configuration, operation, maintenance or decommissioning and disposal.	-
or Building Services	EMB/S1	
(EMB)	Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge.	
(Televant asset types in line with technical knowledge.	
TEAM WORKING	C/K8. Approaches to partner, stakeholder and supplier relationship management	Pass: Demonstrate active participation and
Core:	within the rail industry	engagement in team.
	C/S4. Provide input to technical, business planning, finance and commercial	
	meetings	Pass: Provide positive contribution in both
	C/S5. Use creative thinking and problem solving techniques	leadership and support roles.
	B5. Collaborative working	Distinction: Demonstrate empathy, support,
Specialisms:	RC/S2	clear consultative and decisive behaviours
Rail Civils (RC)	Support and provide advice to colleagues within the Rail Civils discipline only.	towards others, while meeting targets and commitments and giving assurance to internal
Track (T)	T/S2	and external customers that they have fulfilled
Hack (I)	Support and provide advice to colleagues within the Track discipline only.	their responsibilities.
Signalling and Control	SC/S2	anon responsibilities.
Systems (SC)	Produce rail signalling and control solutions for the railway industry based on known	
/	and defined concepts and principles and new and novel approaches.	
	RS/S1	
Rail Systems	Take responsibility for assisting in the management and development of integrated	
Integration (RS)	designs that shall maintain or improve on the existing safety, reliability, capability,	
_	performance, efficiency and maintainability of the railway.	

Traction and Rolling Stock (TRS)	TRS/S1 Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.
Telecoms, Networks and Digital (TND)	TND/S1 Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.
Electrical, Mechanical or Building Services (EMB)	EMB/S1 Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge.

EPA method 2: Vo	ocational Competence Discussion (supported vidence) 60 minutes (+6 mins at IEPAs	s discretion)
KSB group	KSB criteria	Grading criteria
HEALTH AND SAFETY	C/K1. Safe and Professional working practices	Pass: Provide two different work examples distinguishing between safe and unsafe, good and bad practice.
Core:	B2. Professionalism	This will involve clearly identifying and articulating the key risks, their monitoring, mitigation or control in both
	B4. Safe working practice	examples given. At least one example must be drawn from the specialist
Specialisms: Rail Civils (RC)	RC/K1 The requirements, methods and techniques for the installation and maintenance of the track support and track foundation.	area.
	RC/K2 The impact of the railway environment e.g. geotechnics, structures, tunnels, embankments, vegetation and drainage. RC/S1 Apply rail civil engineering skills e.g. structural gauging to support the	
	effective performance and operation of the business. T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces,	
Track (T)	requirements/ methods/techniques for installation and maintenance of track and foundations.	
	T/S1 Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.	
Signalling and Control Systems	SC/K1 The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection.	
(SC)	SC/S1 Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs. RS/K1	
Rail Systems Integration (RS)	The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes.	
	RS/S1 Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.	
Traction and Rolling Stock (TRS)	TRS/K1 The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle.	
	TRS/S1 Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.	

Telecoms,	TND/K1	
Networks and	The application of telecommunication engineering systems e.g. mobile networks,	
Digital (TND)	fixed networks and other services delivered over networks (e.g. CCTV, customer	
	information systems)	
	TND/S1 Support telecommunication, network and digital engineering design,	
	application, configuration, operation, maintenance or decommissioning and	
	disposal.	
Electrical,	EMB/K1	
Mechanical or	Thermal imaging, electrical clearance, wiring, bonding and construction	
Building	processes relating to rail equipment	
Services (EMB)	EMB/K2	
	High and low voltage distribution systems, earthing and bonding, isolation and	
	switching, protection and control systems, power generation and circuit analysis.	
	EMB/S1 Undertake standards review, operational practice, approvals and	
	assessment of relevant asset types in line with technical knowledge.	
PROFESSIONAL	C/K1. Safe and Professional working practices	Pass: Explain what professional working practices are,
WORKING	B2. Professionalism	illustrating their answer with examples from their own work
PRACTICE	B3. A self-disciplined, self-motivated and motivational approach to work	using two examples. They must directly tie in the
Core:	B4. Safe working practice	importance of the professional working practice to the work
	RC/K1 The requirements, methods and techniques for the installation and	completed. (At least one example must be drawn from the
Specialisms:	maintenance of the track support and track foundation.	specialist area).
Rail Civils (RC)	RC/K2 The impact of the railway environment e.g. geotechnics, structures,	
	tunnels, embankments, vegetation and drainage.	Distinction: Reference and discuss the impact of not
	RC/S1 Apply rail civil engineering skills e.g. structural gauging to support the	following professional practice, referencing the potential
	effective performance and operation of the business.	consequences and risks.
	T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces,	
Track (T)	requirements/ methods/techniques for installation and maintenance of track and	
ITACK (I)	foundations.	
	T/S1 Apply track engineering skills e.g. structural gauging to support the effective	
	performance and operation of the business.	
	SC/K1 The requirements, methods and techniques for safe routing, spacing and	
	control of trains e.g. degraded mode, fixed block signalling, and automatic train	
Signalling and	protection.	
Control Systems	SC/S1 Apply rail signalling and control systems skills e.g. independence of	
(SC)	design, alignment to an operating railway, close out of issue logs.	
(33)	SC/S2 Produce rail signalling and control solutions for the railway industry based	
	on known and defined concepts and principles and new and novel approaches	

DO 164 T1
RS/K1 The end to end process for Rail Systems Integration e.g. requirements
management, project interface management, safety in the railway system,
assurance processes.
RS/S1 Take responsibility for assisting in the management and development of
integrated designs that shall maintain or improve on the existing safety, reliability,
capability, performance, efficiency and maintainability of the railway.
TRS/K1 The design and application of Traction & Rolling Stock (T&RS)
engineering systems and the various generic types of legacy or modern rolling
stock across the whole lifecycle.
TRS/K2 The design principles used in legacy and modern rolling stock types and
their rolling stock sub-systems across or within their T&RS engineering subject
matter area(s) (which may be discipline based – e.g. Mechanical, electrical,
electronic, etc. or system based – e.g. Structures, Doors, Brakes, traction,
Wheel/Rail interface, etc. or a mix of both).
TRS/S1 Provide engineering input in their chosen specialist area(s) in the context
of rolling stock design, application, alteration, configuration, operation,
maintenance and disposal.
TND/K1 The application of telecommunication engineering systems e.g. mobile
networks, fixed networks and other services delivered over networks (e.g. CCTV,
customer information systems)
TND/S1 Support telecommunication, network and digital engineering design,
application, configuration, operation, maintenance or decommissioning and
disposal.
EMB/K1 Thermal imaging, electrical clearance, wiring, bonding and construction
processes relating to rail equipment
EMB/K2 High and low voltage distribution systems, earthing and bonding,
isolation and switching, protection and control systems, power generation and
circuit analysis.
EMB/K3 Electrical (e.g. low voltage distribution systems, emergency power
supply systems) and mechanical (e.g. heating, ventilation, water, gas supply
systems)
EMB/S1 Undertake standards review, operational practice, approvals and
assessment of relevant asset types in line with technical knowledge.

SCIENTIFIC, TECHNICAL, ENGINEERING, MATHEMATICAL AND DESIGN PRINCIPLES, AND DELIVERY OF RAIL SPECIFIC ENGINEERING SOLUTIONS Core:	C/K2. The scientific, technical, engineering, mathematical and design principles	Pass: Identify and explain three scientific, technical, engineering, mathematical or design principles in application within both rail generally and specialism. Two of the principles in application must be in their
Specialisms: Rail Civils (RC)	RC/K1 The requirements, methods and techniques for the installation and maintenance of the track support and track foundation. RC/S1 Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business.	specialist area and one example must be more generic. Each must be supported by illustration of the principles in practice drawn from their portfolio of evidence demonstrating a good understanding of the principles in
Track (T)	T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations T/K2 The influences on track layouts from particular aspects of the railway environment, e.g. geotechnical, tunnels, embankments, and drainage. T/S1 Apply track engineering skills e.g. structural gauging to support the effective	application. Pass: The contribution will be evidence-based and the response to follow up questions or challenge handled confidently.
Signalling and Control Systems (SC)	performance and operation of the business. SC/K1 The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection. SC/S1 Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs.	Distinction: Demonstrate a clear understanding of and confidence in dealing with complex theoretical principles in application. Distinction: Provide clear examples of application of theory and be able to lead the discussion from the clear
Rail Systems Integration (RS)	RS/K1 The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes. RS/S2 Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.	exposition and explanation of theory through to its application in practice.

Traction and	TRS/K1 The design and application of Traction & Rolling Stock (T&RS)	
Rolling Stock	engineering systems and the various generic types of legacy or modern rolling	
(TRS)	stock across the whole lifecycle.	
	TRS/S1 Provide engineering input in their chosen specialist area(s) in the context	
	of rolling stock design, application, alteration, configuration, operation,	
	maintenance and disposal.	
	TND/K1 The application of telecommunication engineering systems e.g. mobile	
	networks, fixed networks and other services delivered over networks (e.g. CCTV,	
Telecoms,	customer information systems)	
Networks and	TND/K2 The operating principles in legacy or modern rail telecommunication	
Digital (TND)	technologies (e.g. Rail traffic management systems)	
	TND/S1 Support telecommunication, network and digital engineering design,	
	application, configuration, operation, maintenance or decommissioning and	
	disposal.	
	EMB/K1 Thermal imaging, electrical clearance, wiring, bonding and construction	
Electrical,	processes relating to rail equipment	
Mechanical or	EMB/K2 High and low voltage distribution systems, earthing and bonding,	
Building	isolation and switching, protection and control systems, power generation and	
Services (EMB)	circuit analysis.	
	EMB/K3 Electrical (e.g. low voltage distribution systems, emergency power	
	supply systems) and mechanical (e.g. heating, ventilation, water, gas supply	
	systems)	
	EMB/S1 Undertake standards review, operational practice, approvals and	
	assessment of relevant asset types in line with technical knowledge.	

QUALITY AND CONTINUOUS IMPROVEMENT		Pass: Demonstrate a critical analysis that reflects on the importance of both quality and continuous improvement techniques and processes. This must involve the ability to discuss the strengths, limitations and the positive impacts,
Specialisms: Rail Civils (RC)	RC/K1 The requirements, methods and techniques for the installation and maintenance of the track support and track foundation.	as well as an understanding of why they are appropriate. (Identifying at least two important techniques and processes from their specialist area).
	RC/S1 Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business. RC/S2 Support and provide advice to colleagues within the Rail Civils discipline	Distinction: Be able to offer more than two quality and continuous improvement techniques and processes, and
Track (T)	only. T/K1 Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations.	be able to compare and contrast them. They will be able to explain the relevance and appropriateness of each for their work areas.
	T/K2 The influences on track layouts from particular aspects of the railway environment, e.g. geotechnical, tunnels, embankments, and drainage. T/S2 Support and provide advice to colleagues within the Track discipline only.	Distinction: Demonstrate insightful contextualisation offering relevant theory, artefacts or performance that shows a commitment to quality and continuous
Signalling and Control	SC/K1 The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection	improvement. Distinction: Following critical analysis, makes judgements
Systems (SC)	SC/K2 Rules for the operational interfaces of the railway. SC/S2 Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches	based on clear evidence that evaluates a range of techniques and improvements, with cognisance of new technological developments and innovation in rail and the impact on future operation of the railway.
Rail Systems Integration (RS)	RS/K1 The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes.	impact on future operation of the fallway.
Traction and	RS/S2 Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts. TRS/K1 The design and application of Traction & Rolling Stock (T&RS) engineering	
Traction and Rolling Stock (TRS)	systems and the various generic types of legacy or modern rolling stock across the whole lifecycle. TRS/S1 Provide engineering input in their chosen specialist area(s) in the context	
Telecoms,	of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.	
Networks and Digital (TND)	TND/K1 The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)	

Electrical, Mechanical or Building Services (EMB)	TND/S1 Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal. EMB/K1 Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment EMB/K2 High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis. EMB/K3 Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems) EMB/S1 Undertake standards review, operational practice, approvals and	
	assessment of relevant asset types in line with technical knowledge.	
TEAM WORKING	C/K6. How teams work effectively	Pass: Describes how teams can work effectively, what constitutes collaborative working and can justify why this is
Core:	B1. Communication and influencing skills	important in the occupation.
Specialisms:	B5. Collaborative working	Pass: Provides at least one well worked example showing effective team work and collaboration, explaining what enabled the team working and collaborative approach in
Rail Civils (RC)	RC/S2 Support and provide advice to colleagues within the Rail Civils discipline only.	their specialist area.
Track (T)	T/S2 Support and provide advice to colleagues within the Track discipline only.	
Signalling and Control Systems (SC)	SC/S2 Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches.	
Rail Systems Integration (RS)	RS/S2 Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.	
Traction and Rolling Stock (TRS)	TRS/S1 Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.	

Telecoms,	TND/S1 Support telecommunication, network and digital engineering design,	
letworks and	application, configuration, operation, maintenance or decommissioning and	
Digital (TND)	disposal.	
J ()		
lectrical,	EMB/S1 Undertake standards review, operational practice, approvals and	
Mechanical or	assessment of relevant asset types in line with technical knowledge.	
Building	accessificate of followally access types in line with teeningal knowledge.	
Services (EMB)		
Del vices (LIVID)		

RECRUITMENT AND RETENTION Core:	C/K7. How to attract, recruit, develop and retain people	Pass: Outline how to attract, recruit, develop and retain people. Pass: Cover all four aspects of the criterion, by explaining the importance of each for the rail industry and pressures the industry faces. Distinction: Offers insight into at least two or more of the four areas showing critical awareness and a considered view of the issues as they relate to their area of the rail sector. The apprentice will confidently deal with challenges to their views.
CONTINUOUS PROFESSIONAL DEVELOPMENT Core:	B7. Continuous Professional Development	Pass: Outline the continued professional development needed to keep current in terms of knowledge and skills within the occupation CPD. Distinction: Demonstrate a clear appreciation of the importance of CPD for the individual as a professional, and for the employer, and can discuss the potential return on investment for both. Distinction: Articulate how they plan to keep their knowledge and skills up-to-date.

Appendix 3 Portfolio Authentication Statement

Portfolio Authentication Statement

Authenticity & currency - The work you submit **must** have been produced by you and must be current.

1	Apprentice name: Click or tap here to enter text.				
,	Job title/ role: Click or tap here to enter text.				
Į	JLN number:	Click or tap here to enter text.			
ı	Employer:	Click or tap here to enter text.			
,	Standard name:	Rail and Rail Systems Engineer			
,	Standard code: ST0495				
Please (✓					
	I confirm that the evidence I have submitted within the portfolio report is my own work.				
	I understand that my results may be invalidated if I have submitted work that does not belong to me and which has not been clearly acknowledged.				
	I confirm that the work submitted within the portfolio was created by me pregateway during the end-point apprenticeship period.				
	I confirm that the work submitted within the portfolio meets the requirements of the apprenticeship assessment plan.				
	Apprentice signature: Click or tap here to enter text.				
	Date: Click or tap to enter a date.				

The work you submit must be current and produced by you.

All information provided on this form will be held securely and only used for the purposes provided. Full details on how we use and protect your data are available in our Privacy Notice.

Open Awards tries to meet the highest standards when collecting and using personal information. Customers are encouraged to email info@openawards.org.uk if you believe any data to be incorrect, unfair, misleading or inappropriate.



Appendix 4 Portfolio Evidence and KSB Criteria Reference Sheet

Portfolio Evidence and KSB Criteria Reference Sheet

Apprentice name:	Click or tap here to enter text.
Job title/ role:	Click or tap here to enter text.
ULN number:	Click or tap here to enter text.
Employer/ Provider name:	Click or tap here to enter text.
Apprenticeship standard:	ST0495 Rail and Rail Systems Engineer

Introductory notes:

This completed evidence and criteria reference sheet should be attached to the portfolio of evidence completed by the apprentice. It is designed to enable the work collated within the portfolio to be mapped against the Knowledge, Skills and Behaviours (KSBs) needed to meet the requirements of the apprenticeship standard.

The portfolio should cover all the KSBs within the standard, one piece of evidence may support multiple KSBs.

This form is essential to ensure that:

- Relevant evidence is submitted against the required KSBs
- Allows the End-Point Assessor to clearly identify where this evidence is presented within the portfolio.

It is expected that the Evidence and KSB Criteria Reference Sheet is completed in the following style:

- Evidence number- The number associated to the piece of evidence presented within the portfolio.
- Location- Where the evidence presented is to be found within the portfolio.

For example:

Evidence	Description of evidence	KSB	Location
number		references	
1	Meeting minutes- monthly department progress meeting.	C/K5, B1, B6	Pages 2-3

Candidates should **only** submit evidence for the **core** and the statements that relate to **their specialism**. It is not expected that statements for other specialisms are referenced.

Portfolio Contents

Evidence	Description of evidence	KSB	Location
number		references	

Evidence mapping

Knowledge area	Reference	Statement	Evidence no	Location
Core	C/K1	Safe and Professional working practices		
	C/K2	The scientific, technical, engineering, mathematical and design principles		
	C/K3	How to contribute effectively to the delivery of rail specific engineering solutions		
	C/K4	How strategic decisions are made		
	C/K5	Problem solving and continuous improvement		
	C/K5	How teams work effectively		
	C/K7	How to attract, recruit, develop and retain people		
Rail Civils	RC/K1	The requirements, methods and techniques for the installation and maintenance of the track support and track foundation.		
	RK/K2	The impact of the railway environment e.g. geotechnics, structures, tunnels, embankments, vegetation and drainage.		
Track	T/K1	Rail track geometry requirements, effects of speed, wheel/rail interfaces, requirements/ methods/techniques for installation and maintenance of track and foundations.		
	T/K2	The influences on track layouts from particular aspects of the railway environment, e.g. geotechnical, tunnels, embankments, and drainage.		
Signalling and control systems	SC/K1	The requirements, methods and techniques for safe routing, spacing and control of trains e.g. degraded mode, fixed block signalling, and automatic train protection.		
	SC/K2	Rules for the operational interfaces of the railway.		
Rail Systems Integration	RS/K1	The end to end process for Rail Systems Integration e.g. requirements management, project interface management, safety in the railway system, assurance processes.		

Track and Rolling Stock	TRS/K1	The design and application of Traction & Rolling Stock (T&RS) engineering systems and the various generic types of legacy or modern rolling stock across the whole lifecycle.	
	TRS/K2	The design principles used in legacy and modern rolling stock types and their rolling stock sub-systems across or within their T&RS engineering subject matter area(s) (which may be discipline based – e.g. Mechanical, electrical, electronic, etc. or system based – e.g. Structures, Doors, Brakes, traction, Wheel/Rail interface, etc. or a mix of both).	
Telecoms, Networks and Digital	TND/K1	The application of telecommunication engineering systems e.g. mobile networks, fixed networks and other services delivered over networks (e.g. CCTV, customer information systems)	
J	TND/K2	The operating principles in legacy or modern rail telecommunication technologies (e.g. Rail traffic management systems)	
Electrical, Mechanical or	EMB/K1	Thermal imaging, electrical clearance, wiring, bonding and construction processes relating to rail equipment	
Building Services	EMB/K2	High and low voltage distribution systems, earthing and bonding, isolation and switching, protection and control systems, power generation and circuit analysis.	
	EMB/K3	Electrical (e.g. low voltage distribution systems, emergency power supply systems) and mechanical (e.g. heating, ventilation, water, gas supply systems)	

Skills area	Reference	Statement	Evidence no	Location
Core	C/S1	Keep themselves and others safe		
	C/S2	Apply a range of technical skill sets		
	C/S3	Deliver Rail & Rail Systems Engineering solutions effectively		
	C/S4	Provide input to technical, business planning, finance and commercial meetings		
	C/S5	Use creative thinking and problem solving techniques		
	C/S6	Lead and support single discipline teams		
	C/S7	Manage relationships with a range of stakeholders		
Rail Civils	RC/S1	Apply rail civil engineering skills e.g. structural gauging to support the effective performance and operation of the business.		
	RC/S2	Support and provide advice to colleagues within the Rail Civils discipline only.		
Track	T/S1	Apply track engineering skills e.g. structural gauging to support the effective performance and operation of the business.		
	T/S2	Support and provide advice to colleagues within the Track discipline only.		
Signalling and Control	SC/S1	Apply rail signalling and control systems skills e.g. independence of design, alignment to an operating railway, close out of issue logs.		
Systems	SC/S2	Produce rail signalling and control solutions for the railway industry based on known and defined concepts and principles and new and novel approaches.		
Rail Systems Integation	RS/S1	Take responsibility for assisting in the management and development of integrated designs that shall maintain or improve on the existing safety, reliability, capability, performance, efficiency and maintainability of the railway.		
	RS/S2	Undertake systems integration engineering skills to manage project requirements e.g. use requirements software to identify conflicts.		

Traction and Rolling Stock	TRS/S1	Provide engineering input in their chosen specialist area(s) in the context of rolling stock design, application, alteration, configuration, operation, maintenance and disposal.	
Telecoms, Networks and Digital	TND/S1	Support telecommunication, network and digital engineering design, application, configuration, operation, maintenance or decommissioning and disposal.	
Electrical, Mechanical or Building Services	EMB/S1	Undertake standards review, operational practice, approvals and assessment of relevant asset types in line with technical knowledge.	

Appendix 5 Vocational Competence Discussion Assessment Record

Vocational competence Discussion Assessment Record



Apprentice name:	Click or tap here to enter text.			
Pathway:	Click or tap here to enter to	ext.		
ULN:	Click or tap here to enter to	ext.		
Employer name	Click or tap here to enter to	ext.		
Apprenticeship standard:	ST0495 Rail & Rail Systems Engineer			
IEPA name:	Click or tap here to enter text.			
Location:	Click or tap here to enter to	ext.		
Date of assessment:		Click or tap to enter a date	·).	
Photographic proof of identity provided:	Choose an item. Reasonable adjustments approved Choose an item.			
Start time:	Click or tap here to enter text.	Finish time:	Click or tap here to enter text.	

Introductory notes:

- The vocational competence discussion must be carried out under controlled conditions in a suitable environment.
- The IEPA must have reviewed the apprentice's portfolio evidence report in advance.
- The IEPA must introduce themselves and confirm their identity to the apprentice and employer/ representative (and others present if appropriate).
- The IEPA must agree with the employer/ representative how disruptions will be managed (e.g., alarms and emergencies) including confirming evacuation procedures.
- The apprentice must provide photographic proof of their identity before the technical interview commences. Where this is not provided, the assessment must **not** proceed.
- If at this stage the IEPA believes there is a conflict of interest, the assessment should **not** proceed and they should contact Open Awards for guidance.
- If reasonable adjustments have been requested and approved by Open Awards, the IEPA should record this and confirm that the apprentice is aware of those adjustments before starting.
- The vocational competence discussion should be recorded electronically, subject to the apprentice's agreement; where permission is not given it is permissible for another independent assessor to be present to document evidence presented.
- If the vocational competence discussion is undertaken remotely, please record the system used (e.g., Zoom, MS Teams) and the location of both the IEPA and the apprentice.
- The IEPA must confirm the apprentice is ready to be assessed and understands the assessment parameters.
- The technical interview **must last for 60 minutes** (+/-10%)
- The IEPA must ask **sufficient** questions to give the apprentice an opportunity to demonstrate **all** the criteria in the **seven (7)** key elements shown in the grading criteria table on pages 3,4 and 5.

Specialist Areas	Code
Rail Civils	RC
Track	Т
Signals and control systems	SC
Rail System Integration	RSI
Traction and Rolling Stock	TR
Telecoms, Network and Digital	TND
Electrical, Mechanical or Building Services	EMB

Area of Assessment	KSBs	Pass criteria All pass criteria are required to be achieved to achieve a Pass	Merit/Distinction Criteria A successful contribution at MERIT will meet the Pass Criteria in all 7 areas of assessment and meet at least 3 of the 5 Merit/Distinction criteria below. A successful contribution at DISTINCTION will meet the Pass Criteria in all 7 areas of assessment and meet all 5 of the Merit/Distinction criteria below.	Outcome
HEALTH AND SAFETY	Core: C/K1; B2 and B4 Specialisms: RC/K1; RC/K2; RC/S1 T/K1; T/S1 SC/K1; SC/S1 RS/K1; RS/S1 TRS/K1; TRS/S1 TND/K1; TND/S1 EMB/K1; EMB/K2; EMB/S1	Provide two different work examples distinguishing between safe and unsafe, good and bad practice. This will involve clearly identifying and articulating the key risks, their monitoring, mitigation or control in both examples given. At least one example must be drawn from the specialist area.		Choose an item.

Area of Assessment	KSBs	Pass criteria All pass criteria are required to be achieved to achieve a Pass	Merit/Distinction Criteria A successful contribution at MERIT will meet the Pass Criteria in all 7 areas of assessment and meet at least 3 of the 5 Merit/Distinction criteria below. A successful contribution at DISTINCTION will meet the Pass Criteria in all 7 areas of assessment and meet all 5 of the Merit/Distinction criteria below.	Outcome
PROFESSIONAL WORKING PRACTICE	Core: C/K1; B2; B3 and B4 Specialisms: RC/K1; RC/K2; RC/S1 T/K1; T/S1 SC/K1; SC/S1; SC/S2 RS/K1; RS/S1 TRS/K1; TRS/K2; TRS/S1 TND/K1; TND/S1 EMB/K1; EMB/K2; EMB/K3; EMB/S1	Explain what professional working practices are, illustrating their answer with examples from their own work using two examples. They must directly tie in the importance of the professional working practice to the work completed. (At least one example must be drawn from the specialist area).	Reference and discuss the impact of not following professional practice, referencing the potential consequences and risks.	Choose an item.
SCIENTIFIC, TECHNICAL, ENGINEERING, MATHEMATICAL AND DESIGN PRINCIPLES, AND DELIVERY OF RAIL SPECIFIC ENGINEERING SOLUTIONS	Core: C/K2 Specialisms: RC/K1; RC/S1 T/K1; T/K2; T/S1 SC/K1; SC/S1 RS/K1; RS/S2 TRS/K1; TRS/S1 TND/K1; TND/K2; TND/S1 EMB/K1; EMB/K2; EMB/K3; EMB/S1	Identify and explain three scientific, technical, engineering, mathematical or design principles in application within both rail generally and specialism. Two of the principles in application must be in their specialist area and one example must be more generic. Each must be supported by illustration of the principles in practice drawn from their portfolio of evidence demonstrating a good	Demonstrate a clear understanding of and confidence in dealing with complex theoretical principles in application. Provide clear examples of application of theory and be able to lead the discussion from the clear exposition and explanation of theory through to its application in practice.	Choose an item.

Area of Assessment	KSBs	Pass criteria All pass criteria are required to be achieved to achieve a Pass	Merit/Distinction Criteria A successful contribution at MERIT will meet the Pass Criteria in all 7 areas of assessment and meet at least 3 of the 5 Merit/Distinction criteria below. A successful contribution at DISTINCTION will meet the Pass Criteria in all 7 areas of assessment and meet all 5 of the Merit/Distinction criteria below.	Outcome
QUALITY AND CONTINUOUS IMPROVEMENT	Core: None Specialisms: RC/K1; RC/S1; RC/S2 T/K1; T/K2; T/S2 SC/K1; SC/K2; SC/S2 RS/K1; RS/S2 TRS/K1; TRS/S1 TND/K1; TND/S1 EMB/K1; EMB/K2; EMB/K3; EMB/S1	understanding of the principles in application. The contribution will be evidence-based and the response to follow up questions or challenge handled confidently. Demonstrate a critical analysis that reflects on the importance of both quality and continuous improvement techniques and processes. This must involve the ability to discuss the strengths, limitations and the positive impacts, as well as an understanding of why they are appropriate. (Identifying at least two important techniques and processes from their specialist area).	Be able to offer more than two quality and continuous improvement techniques and processes, and be able to compare and contrast them. They will be able to explain the relevance and appropriateness of each for their work areas. Demonstrate insightful contextualisation offering relevant theory, artefacts or performance that shows a commitment to quality and continuous improvement. Following critical analysis, makes judgements based on clear evidence that evaluates a range of techniques and improvements, with cognisance	Choose an item.

Area of Assessment	KSBs	Pass criteria All pass criteria are required to be achieved to achieve a Pass	Merit/Distinction Criteria A successful contribution at MERIT will meet the Pass Criteria in all 7 areas of assessment and meet at least 3 of the 5 Merit/Distinction criteria below. A successful contribution at DISTINCTION will meet the Pass Criteria in all 7 areas of assessment and meet all 5 of the Merit/Distinction criteria below.	Outcome
			of new technological developments and innovation in rail and the impact on future operation of the railway.	
TEAM WORKING	Core: C/K6; B1 and B5 Specialisms: RC/S2 T/S2 SC/S2 RS/S1 TRS/S1 TND/S1 EMB/S1	Describes how teams can work effectively, what constitutes collaborative working and can justify why this is important in the occupation. Provides at least one well worked example showing effective team work and collaboration, explaining what enabled the team working and collaborative approach in their specialist area.		Choose an item.
RECRUITMENT AND RETENTION	Core: C/K7 Specialisms: n/a	Outline how to attract, recruit, develop and retain people. Cover all four aspects of the criterion, by explaining the importance of each for the rail industry and pressures the industry faces.	Offers insight into at least two or more of the four areas showing critical awareness and a considered view of the issues as they relate to their area of the rail sector. The apprentice will confidently deal with challenges to their views.	Choose an item.

Area of Assessment	KSBs	Pass criteria All pass criteria are required to be achieved to achieve a Pass	Merit/Distinction Criteria A successful contribution at MERIT will meet the Pass Criteria in all 7 areas of assessment and meet at least 3 of the 5 Merit/Distinction criteria below. A successful contribution at DISTINCTION will meet the Pass Criteria in all 7 areas of assessment and meet all 5 of the Merit/Distinction criteria below.	Outcome
CONTINUOUS PROFESSIONAL DEVELOPMENT	Core: B7 Specialisms: n/a	Outline the continued professional development needed to keep current in terms of knowledge and skills within the occupation CPD.	Demonstrate a clear appreciation of the importance of CPD for the individual as a professional, and for the employer, and can discuss the potential return on investment for both. Articulate how they plan to keep their knowledge and skills up-to-date.	.Choose an item.

Vocational Competence Discussion Fail Criteria

The apprentice will be deemed as a 'fail' for the professional discussion element if the criteria / descriptors for the 'Pass' grade are not met.

Comments on evidence presented t	o justify assessment dec	cisions	
Click or tap here to enter text.			
'			

Notes on grading

No. of pass criteria met	Click or tap here to enter text.
No. of merit/ distinction criteria met (out of 5)	Click or tap here to enter text.
Recommend grade awarded	Choose an item.

Developmental feedback for improvement in the event of a recommended Fail grade (to be sent by Open Awards to the apprentice and employer)						
Click or tap here to enter text.						
Recommend (please tick) Resit Choose an item. Retake Choose an item.						

Confirmation

I confirm that this is an accurate record of the assessment undertaken and that the evidence presented during the assessment by the apprentice meets the requirements of the standard for authenticity, currency, sufficiency, independence, reliability and validity.

IEPA Signature:	Click or tap here to enter text.	Date:	Click or tap to enter a date.
Name of IQA (if sampled)	Click or tap here to enter text.	Date:	Click or tap to enter a date.
Signature of IQA	Click or tap here to enter text.	IQA Ref:	Click or tap here to enter text.

All information provided on this form will be held securely and only used for the purposes provided. Full details on how we use and protect your data are available in our Privacy Notice, available on request.

Open Awards tries to meet the highest standards when collecting and using personal information. Customers are encouraged to email info@openawards.org.uk if you believe any data to be incorrect, unfair, misleading or inappropriate.

Optional section - IEPA self-reflection on assessmen	t
(e.g., link to CPD plan)	

Click or tap here to enter text.

Appendix 6 EPA Planning Form

EPA Planning Form



This form is applicable to any End-point assessment (EPA) activity where the assessment(s) is undertaken at a venue not directly managed by Open Awards and to which the independent End-point IEPA (IEPA) is required to attend in-person (i.e., the assessment(s) is undertaken face-to-face and not remotely).

The form must be fully completed by the provider or employer (as appropriate) and uploaded to the Open Awards Secure Portal at the same time as the assessment(s) is booked. Where remedial actions are identified, these must be addressed prior to the assessment day.

Full address of	Clisty on ton loans to ententant		
	Click or tap here to enter text.		
assessment venue			
Location IEPA	This is important on large sites where there may be multiple receptions/ entrances. E.g.,		
should report to	"Reception in Building 'C' on the attached map"		
upon arrival			
•	Click or tap here to enter text.		
Name of contact	This person will be responsible for meeting the IEPA on arrival, providing an appropriate		
person at venue	health & safety briefing and must be available throughout the assessment(s) to deal with		
porson at ronds	queries from the IEPA or emergencies		
	Clink on ton leave to ententery		
	Click or tap here to enter text.		
Telephone of	Landline Click or tap here to enter text.		
contact person at	*		
venue	Mobile Click or tap here to enter text.		
Access	Is there anything the IEPA should be aware of. E.g., postcode to use with Sat Nav if		
710000	different from above, car parking arrangements on/ off site, access from nearest train station		
arrangements			
	Click or tap here to enter text.		
Specific	E.g., is PPE required and if so, is the IEPA expected to provide this or will it be provided for		
requirements the	them		
IEPA should be			
	Click or tap here to enter text.		
aware of			
Name of person	Click or tap here to enter text.		
completing this	•		
form			
Job title/ position	Click or tap here to enter text.		
•	•		
Date form	Click or tap to enter a date.		
completed and			
uploaded to Open			
Awards Portal			
/ tirarao i Ortar			

Any other relevant information that would help the IEPA plan for the EPA. E.g., challenging customers may be present or goods delivery is expected on the day of assessment.

Click or tap here to enter text.

	Yes/ No	If 'No', what remedial actions will be put in place to address this prior to the assessment(s)
There is a current health & safety policy in	Choose	Click or tap here to enter text.
place for the venue which covers the EPA	an	
activities, the apprentice, the IEPA and	item.	
other visitors undertaking quality assurance	ittii.	
of the assessment(s)		
There is appropriate liability insurance in	Choose	Click or tap here to enter text.
place which covers both the apprentice,	an	1
IEPA and other visitors undertaking quality	item.	
assurance of the assessment(s)	1001111	
The provider/ employer will undertake an	Choose	Click or tap here to enter text.
appropriate risk assessment relevant to the	an	
assessment(s) and share this with both the	item.	
apprentice and the IEPA		
The apprentice will have access to any	Choose	Click or tap here to enter text.
Personal Protective Equipment required	an	
and received prior training in its use and	item.	
storage. This PPE will be fit-for-purpose.		
There is adequate, accessible and signed	Choose	Click or tap here to enter text.
posted first aid provision including first aid	an	
personnel and medical supplies available	item.	
on the day of the assessment(s)	CI	
An emergency contact at the venue will be	Choose	Click or tap here to enter text.
available for duration of the EPA	an	
	item.	
There are appropriate means of fire	Choose	Click or tap here to enter text.
detection and raising the alarm in the event	an	
of a fire	item.	
There is an emergency procedure (e.g., fire	Choose	Click or tap here to enter text.
or first aid) in place which will be	an	
communicated to the apprentice and IEPA	item.	
before the assessment(s) commence	~:	
The venue and the assessment	Choose	Click or tap here to enter text.
environment are safe and hazards	an	
appropriately managed in line with current	item.	
best practice	CI	
Welfare facilities (e.g., toilets, washing,	Choose	Click or tap here to enter text.
eating and changing) are adequate, safe,	an	
healthy, clean and accessible to the IEPA	item.	
All necessary safety notices (e.g., warning	Choose	Click or tap here to enter text.
signs, fire-related, first aid) are displayed	an	
	item.	
All machinery and equipment required is in	Choose	Click or tap here to enter text.
good working order, meets appropriate	an	
legal standards and has been maintained	item.	
by a competent person		

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