

# **EPA Apprentice**

End-point Assessment Apprentice Guidance for:

# Level 2 Rail Engineering Operative





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## **Document Amendments**

Amendment Made	Issue Number	Effective From
New document	1.0	15.04.2019
Updated documents	1.1	04-05-2020



#### **About EAL**

Since 1964, EAL (Excellence, Achievement and Learning) has been awarding superior vocational qualifications and apprenticeship components for engineering, building services and related sectors.

EAL has been at the heart of new apprenticeship standards development, supporting employer trailblazer development groups for key industry occupations since 2013, when the reforms began. With our long-standing tradition of being closer to industry and designing qualifications that reflect this close partnership, EAL is perfectly positioned to guide the employer development groups' work. Our expertise, knowledge and support ensures the new standards meet the needs of all employers, from SMEs to multinationals, and provide learners with the best possible start to their careers.

EAL is an end-point assessment organisation (EPAO) and is listed on the Register of End-Point Assessment Organisations (RoEPAO).

#### **Equal Opportunities and Diversity**

EAL expects all employers to enable you to have equal access to training and assessment for end-point assessment (EPA) in line with the Equality Act 2010 and protected characteristics. Further details can be found in the EAL Equal Opportunities and Diversity Policy: <a href="http://www.eal.org.uk/centre-support/centre-support/policies-and-important-documents">http://www.eal.org.uk/centre-support/centre-support/policies-and-important-documents</a>

#### **Customer Service and Feedback**

Customer service is a fundamental part of EAL's commitment to you. EAL aims to ensure that all customers receive a high quality efficient service. We are always interested in feedback and if you have any comments or feedback on our qualifications, products or services, please contact the Customer Services Team:

EAL Customer Services Tel: +44 (0)1923 652 400

Email: <a href="mailto:customercare@eal.org.uk">customercare@eal.org.uk</a>



#### **Document Purpose**

To ensure a consistent approach when carrying out rail activities, professional discussion, portfolio of evidence and final employer endorsement of occupational competence across all independent assessment panel members, assessment sites, apprentices and assessment decisions.

This document, and its contents, will be used to **guide** you on the outcome of the assessment decisions.

It supports the Apprentice Recording Document, which has been developed to record the outcome of the Apprentices portfolio of evidence of occupational competence, independent occupational competence validation interview (Viva) and the final employer endorsement of occupational competence. The Apprentice Recording Document is an auditable record of the End Point Assessment (EPA) activity.

This document should be used in conjunction with EAL's End-point Assessment Policies and Procedures Handbook.

#### **Overview**

The EPA is designed to enable you to demonstrate that you are fully conversant in the knowledge, skills and behaviours (KSBs) expected of individuals working at this level. It is designed to provide assessors with a holistic view of you, and to allow them to assess to what extent you meet, or exceed, the level 2 rail engineering operative apprenticeship standard. The EPA must be completed within 16 weeks after you have met the EPA gateway requirements?

The Apprenticeship Standard and End-point Assessment Plan defines when, what, who and how the EPA is assessed. All those participating and delivering this EPA, which includes you, assessors and employers, **must** refer to the following principle documents for the full details of the EPA requirements:

#### **Rail Engineering Operative**

- Apprenticeship Standard STO317, (approved for delivery 19th April 2016).
- End-point Assessment Plan.

Both of which are currently available here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

Whilst elements of the Apprenticeship Standard and End-point Assessment Plan have been reproduced within this document under the following licence: <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/">http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/</a>, it is the responsibility of the assessors to ensure that you are being assessed against the correct version of the Apprenticeship Standard and End-point Assessment Plan.



#### **End-point Assessment Gateway**

Your employer must satisfy themself that you are ready for your end-point assessment, which is evidenced by you consistently working at or above the level set out in the occupational standard.

In addition to the employer's confirmation that you are working at or above the level in the occupational standard, the following gateway requirements must be met prior to you starting the EPA:

- Demonstrated competence to operate safely in the rail environment.
- Completed the Mandatory Knowledge and Competence qualifications including demonstration of the behaviours expected
- You submitted a completed portfolio of evidence authenticated by employer
- You have already achieved English and Mathematics at level 1, as a minimum.

  (For those with an education, health and care plan or a legacy statement, the apprenticeship's English and mathematics minimum requirement is Entry Level 2 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.)
- Take a level 2 English & Mathematics test prior to their end point assessment

Independent assessment panel members must ensure that the **Gateway Checklist** document (**Appendix 1**) has been completed to confirm the above requirements have been met.

#### **Assessment Methods**

The end-point assessment is made up of three elements, which are equally weighted (Pass/Fail):

- 1. Apprentices portfolio of evidence of occupational competence.
- 2. Independent occupational competence validation interview (Viva).
- 3. Final employer endorsement of occupational competence.

#### **Assessment Method 1: Portfolio of Evidence**

#### What is a portfolio of evidence?

The portfolio of evidence is where you can showcase your knowledge, skills and behaviours by demonstrating the specific work related tasks to your employer on how you understand the company in terms of their products, processes, procedures, tools, equipment, materials, documentation and information systems. The portfolio will provide evidence on what you have learnt and how this knowledge and skill has been applied to real work tasks whilst developing an understanding by resolving engineering related problems.

In your portfolio of evidence you must include a minimum of <u>three</u> different examples of component performance evidence that will include the following:

Products of your work, such as items that have been produced or worked on, drawings, plans, production and /or quality records, reports, documents produced as part of a work activity, records or photographs of the completed activity, together with evidence of the way you have carried out the activities to meet the requirements of the standard such as assessor observations, supervisor/mentor references/witness testimonies or authenticated apprentice reports of the activities undertaken.



#### How will the portfolio of evidence be assessed?

Your portfolio of evidence will go through an internal review process which will be undertaken by the employer assessors/mentor certifying that the required standard for professional competence has been achieved.

During the review and assessment of the portfolio of evidence, on some occasions this may contain insufficient evidence that will not meet the requirements of the standard. The decision will be made that the evidence will not be deemed ready for the Viva submission. You will be advised on the shortfalls of evidence, additional advice will be provided on how to overcome areas of concern. Once the evidence has been resubmitted and there is sufficient evidence then your portfolio will be submitted to the independent assessor undertaking the Viva.

The full details of the portfolio of evidence requirements can be found in the end-point assessment plan for this standard here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

#### **Portfolio of Evidence Requirements:**

On commencement of the apprenticeship, you must begin to retain a portfolio of evidence, which must be finalised before passing through the gateway.

A completed portfolio of evidence is a compulsory EPA gateway requirement that supports the EPA Professional Discussion component.

Employers/training providers are free to devise their own version of the portfolio of evidence but the portfolio of evidence must contain the following information:

- The name of the apprentice.
- Details of the apprentice's workplace.
- Evidence to support the knowledge, skills and behaviours of the apprenticeship standard that are
  mapped to the Professional Discussion assessment method. Each of these knowledge, skills and
  behaviour (KSB) statements must be evidenced three times (evidence can be provided through a
  range of sources, for example work reviews, department feedback) and mapped to the relevant
  KSBs. Each piece of evidence will cover multiple KSBs.
- Confirmation from the employer that the tasks evidenced in the portfolio were completed to the required standard of the organisation.
- Document the off-the-job training that has taken place during the on-programme phase, with at least **20%** of their employed time **off-the-job**.
- Copy of English and mathematics certificates.

Your **employer** must sign-off the **portfolio** of evidence, confirming the demonstration of competence against the KSBs assigned to this assessment component and authenticating its contents.

You must submit your portfolio of evidence to EAL as your EPAO when applying for the EPA. An independent assessor will check qualification outcomes and review the portfolio to glean personalised information that will assist the Professional Discussion component of the EPA.



The full details of the portfolio of evidence requirements can be found in the end-point assessment plan for this standard here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

#### **Assessment Method 2: Occupational Competence Validation Interview (Viva)**

The Occupational Competence Validation (Viva) Interview is an interactive interview focussed on all the components of the apprenticeship Standard, which will enable the employer to validate your occupational competence. It is a structured and formal discussion between you and your Employers appointed independent Assessor. The portfolio will be used as a source of evidence by which you can exemplify your responses to questions asked by the assessor.

The purpose of the professional discussion is to determine the extent to how much you understand the requirements of your role as defined by the standard and to explore them through the discussion.

Behaviours and knowledge shall be assessed using this professional discussion (supported by a mandatory portfolio of evidence completed on programme) and the outcome shall be graded as Pass or Fail these are mapped in the end-point assessment plan for the standard.

The portfolio itself will not be assessed, but it will be used by the assessor to prepare the questions for the professional discussion and by you to exemplify your response to the prepared questions.

#### 1-2-1 Discussion with End-point Assessor

- The professional discussion will assess the knowledge, skills and behaviours as specified in the endpoint assessment plan for the standard.
- The professional discussion shall be supported by a portfolio of evidence.
- The portfolio of evidence shall be made available to the assessment organisation no less than **10 days** prior to the professional discussion to allow for preparation.
- The professional discussion shall last **50-60 minutes** and the assessor will have the discretion to increase the time of the discussion by up to 10% to allow the apprentice to complete this method of the EPA.
- The professional discussion shall be carried out by an independent end-point assessor appointed by EAL as the EPAO.
- The discussion shall take place in an environment which is free from interruptions.
- Prior to the assessment you shall be given suitable notice, not less than **5 working days**, to provide preparation time (for example to make travel arrangements if necessary).
- Independent assessors must ask you 10 questions, from a question bank prepared by EAL as the EPAO, covering core knowledge, core skills, specific knowledge, skills and behaviours as specified the end-point assessment plan for the standard. Supplementary questions are allowed to seek clarification



#### **Professional Discussion Criteria:**

The Viva assessment is achieved whereby you will answer questions from the key areas of the standards, questions will only be directed during your professional discussion which form part of the Rail Engineering standard requirements. The Level of questioning will cover your workplace competences whereby you should be able to discuss using examples from your portfolio. There will be six key discussion areas, each able to be developed or checked to confirm level of understanding or performance. The six discussion areas must result in *satisfactory* responses in order to achieve a pass for the Viva.

A satisfactory response is one that:

Reassures the assessor/s that the apprentice understands or is demonstrating the required level of knowledge, ability and /or performance

During the professional discussion the independent assessor must look to establish the level of achievement in the following areas:

- Understand the ability to apply safe working practice and follow appropriate legislation and policies
- Ability to perform rail engineering tasks (general and pathway specific)
- Ability to plan, execute and make good worksites, tools and resources
- Recognition of and ability to perform common and specialist maintenance and repair, maintenance, renewal and construction tasks
- Understanding of the commercial pressures on this part of the rail sector
- Ability to communicate effectively and in a timely fashion and work as part of a team

#### The End-point Assessor Must:

- Plan the professional discussion (supported by the portfolio of evidence) prior to it taking place and ensure that it is relevant to the standard.
- Ensure that the apprentice understands the process, the possible outcomes and how it is graded.
- Ensure they take steps to put the apprentice at ease.
- Ensure that he/she has the grading criteria and relevant documentation to hand before commencing the professional discussion (supported by portfolio of evidence).
- Complete the relevant documentation prepared by EAL as the EPAO, taking notes of what is said.
- Ensure that the outcome of assessment is notified to EAL as the EPAO within the timescale set by them.
- Ensure any special needs highlighted by the employer and training provider are taken into consideration in line with EAL's Reasonable Adjustments policy.
- Declare any information to the AOO in relation to any conflict of interests between themselves and the apprentice (this may extend to the organisation you work for or have worked for).
- Make robust assessment decisions based on your review of the evidence taking into account all of the relevant evidence submitted or presented by the apprentices following the marking criteria
- Record assessment decisions, complete reports and maintain assessment records accurately and in accordance with Apprentice Assessment Organisation requirements
- Participate in standardisation activities to ensure the consistency of assessment decisions and processes
- Bring to the Apprentice Assessment Organisation's immediate attention suspected cases of malpractice or maladministration and assist the Apprentice Assessment Organisation, if required in malpractice investigations
- Assist the Apprentice Assessment Organisation, if required with appeals from apprentices about assessment decisions



- Provide access to information and records when requesting by internal quality assurance staff who
  are acting on behalf of the Apprentice Assessment Organisation
- Attend initial and ongoing training events (at least annually) and keep own End Point Assessment knowledge and skills up-to-date through continued professional development

The full details of the professional discussion requirements can be found in the end-point assessment plan for this standard here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

#### **Assessment Method 3: Final Employer Endorsement of Occupational Competence**

Once the Viva has been successfully completed, the employer will undertake the final sign off/Employer endorsement stage of the apprenticeship by signing the occupational competence validation interview (Viva) document along with the apprentice and the employer nominated training provider (this can be optional).

The Assessing Organisation will then make an application to the designed body for the Apprenticeship completion certificate.

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

#### **Behaviours Assessment**

You are expected to demonstrate the behaviors, as detailed within the assessment plan for the standard, throughout the end-point assessment. Furthermore, your portfolio will evidence the required behaviours of the apprenticeship. The behaviour statements **must** be evidenced **three** times. The expectation is that the independent assessor will utilise the professional discussion to assess the behaviours detailed within of the assessment plan here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

#### **Grading**

Independent assessors must individually grade each assessment method according to the requirements set out in the end-point assessment plan for this standard. Restrictions on grading apply where apprentices re-sit/re-take an assessment method – see re-sit/re-take section below.

The three assessment methods outlined are **equally** weighted. EAL as the EPAO will combine the grades of all three assessment methods to determine the overall EPA grade.

To achieve an EPA **pass**, you must achieve a **pass** in the portfolio of evidence for occupational competence, independent occupational competence validation interview (Viva) and Final employer endorsement of occupational competence.

For the occupational Competence Validation Interview (Viva) this will be a binary pass/fail grade

Overall Apprenticeship will be a binary pass/fail grade

A fail in any assessment method will result in an EPA fail.



Independent assessors' decisions must be subject to **moderation** by EAL as the EPAO. Decisions **must not** be confirmed until after moderation.

End Point Assessment Stage	Grade	Action as a result of grade	Grade	Action as a result of grade
1.End Point Assessment Portfolio		Is the portfolio sufficient to support a Viva, if so the apprentice progresses to Viva		If the insufficient, the Apprentice to improve the portfolio to expected standard and resubmit to Gateway
2.Viva assessing Occupational Competence	Pass	Apprentices qualification certificates, EPA portfolio and record of Viva passed to independent assessor	Fail	Apprentice re-sits the Viva
3.Independent Assessment of evidence	Pass	Assessing Organisation notifies employer that the evidence demonstrates that the Apprentice has met the requirements. Employer provides final sign off for occupational competence	Fail	Independent Assessor provides feedback to employer as to why the apprentice has failed. Apprentice addresses feedback through either resitting their viva and if required upgrading their portfolio. Employer reviews processes to understand why the apprentice was allowed through to the independent assessment stage
4.Overall Apprenticeship Grade	Pass	Independent assessor applies for Apprenticeship certificate	Fail	The Apprentice is required to pass all EPA stages of the end point assessment in order to achieve an overall pass grade

Note – it is important to note the standard has mandatory qualifications as part of the "On programme assessment". The knowledge qualifications will be assessed on a multiple choice grade basis (e.g. pass, merit and distinction grading). The occupational competence will be a binary pass or fail i.e. "competent" "not yet competent"

The full details of the grading requirements can be found here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/



#### **Re-sits and Re-takes**

If you fail one or more assessment method, you will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

You should have a supportive action plan to prepare for the re-sit or a re-take. Your employer will need to agree that a re-sit or re-take is an appropriate course of action.

If you fail any of the assessment methods, and therefore the EPA, in the first instance, you will be required to re-sit/re-take those failed assessment methods.

Any assessment method re-sits or re-take must be taken within 16 weeks of the fail notification, otherwise the entire EPA must be taken again, unless, in the opinion of EAL as the EPAO, exceptional circumstances apply outside the control of you or your employer.

Re-sits and re-takes **are not** offered to you if you want to move from pass to distinction.

Where any assessment method has to be re-sat or re-taken, you will be awarded a **maximum** EPA grade of **pass**, unless EAL as the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

If the re-take/re-sit relates to the professional discussion, you must be questioned on the same subject area.

#### **Roles and Responsibilities**

There are five main roles involved in the end-point assessment process: **you**, the **employer**, the employer **technical expert**, EAL as the **EPAO** and the **independent assessor**. A table listing their main responsibilities can be found in the end-point assessment plan for this standard here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/

#### Mapping of Knowledge, Skills and Behaviours

A table, which provides full mapping of the KSBs, can be found in the end-point assessment plan for this standard here:

https://www.instituteforapprenticeships.org/apprenticeship-standards/rail-engineering-operative/



#### **Appendix 1: Gateway Checklist**

The EPA must only start once the employer is satisfied that you are consistently working at, or above, the level set out in the occupational standard; that means you have achieved occupational competence. In making this decision, the employer may take advice from your training provider(s) but the decision must ultimately be made solely by the employer.

In addition to the employer's confirmation that you are working at or above the level in the occupational standard, the following gateway requirements must be met prior to you starting the EPA:

The apprentice has:	Evidence reference	Employer/provider confirmation (V)	EPAO confirmation (√)
Demonstrated competence to operate safely in the rail environment.	Click or tap here to enter text.		
Completed the Mandatory Knowledge and Competence qualifications	Click or tap here to enter text.		
Submitted demonstration of Behaviours expected	Click or tap here to enter text.		
*Achieved a level 1 English & Maths	Click or tap here to enter text.		
*Take a level 2 English & Maths test prior to their end point assessment	Click or tap here to enter text.		
Submitted <u>three</u> different examples of competent performance evidence	Click or tap here to enter text.		

<sup>\*</sup> For those with an education, health and care plan or a legacy statement, the apprenticeships English and mathematics minimum requirement is Entry Level 3. British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.



# Appendix 2: Assessment Method 2 Portfolio development and layout

Each employer will have their own preferred approach and layout of the portfolio. How you present the information to your employer for the Gateway review is important to ensure it meets that requirement of the standard. After all you are using this portfolio to showcase your skills and knowledge you have learnt during your apprenticeship, so presenting a good quality record of the jobs you have completed may be the first impression your Independent Assessor will see from you prior to meeting with you at your Viva Interview.

The portfolio will contain a minimum of three holistic examples of your performance in relation to the work you have completed. The evidence will be recorded towards the end of your apprenticeship to meet the level of demand and complexity required by the standard and will include a detailed record of how you completed each task. Your portfolio can be hand written or electronic and include sketches and technical information you feel appropriate.

Here are some key features you may wish to include in your portfolio:

Front page – Your company name, your name, the title of the apprenticeship Index of portfolio

A cross reference to the specific Apprenticeship Standard
List of witnesses/job titles

Page heading - job reference /title and date of task

#### Sub headings

Job instructions – summarise the activity

Preparation – tools and equipment and safety considerations

Information obtained – drawings /charts/instruction, manuals, permit to work

Safety measures applied

PPE

Planning how the task will be done or following a planned sequence of operations Method – your report of how you completed the Job

- Include written details for each step of the process you followed
- Key safety checks
- Key steps for quality checks
- Use sketches and photos where appropriate to show detail
- Include technical detail
- Problems you identified and how you resolved them
- Include details of colleagues you sought advice or help from
- Testing and quality checks you completed
- The records and information you completed and what systems you used

How you restored the area and disposed of any contaminated materials with consideration to the environment conducted your handover and concluded the job

What you have learnt

- Skills
- Knowledge

What organisational behaviours have you demonstrated?

Finally, you must ask your employer/ mentor to review and check your work, sign it along with any witnesses who can authenticate this is a true record of the work you carried out.



## **Insert name of Company**

Click or tap here to enter text.

## **Insert Apprentice name**

Click or tap here to enter text.

# **Insert title of the Apprenticeship**

Click or tap here to enter text.







#### **Example of performance 1, title of job:** Click or tap here to enter text.

Job instructions	Page enter text.
Preparation	Page enter text.
Information obtained	Page enter text.
Safety measures applied	Page enter text.
PPE	Page enter text.
Planning	Page enter text.
Method	Page enter text.
Testing and quality checks you completed	Page enter text.
Records and information	Page enter text.
Restored the area	Page enter text.
Handover and concluded the job	Page enter text.
Key learning points	Page enter text.
Organisational behaviours demonstrated	Page enter text.

#### **Example of performance 2, title of job:** Click or tap here to enter text.

Job instructions	Page enter text.
Preparation	Page enter text.
Information obtained	Page enter text.
Safety measures applied	Page enter text.
PPE	Page enter text.
Planning	Page enter text.
Method	Page enter text.
Testing and quality checks you completed	Page enter text.
Records and information	Page enter text.
Restored the area	Page enter text.
Handover and concluded the job	Page enter text.
Key learning points	Page enter text.
Organisational behaviours demonstrated	Page enter text.

#### **Example of performance 3, title of job:** Click or tap here to enter text.

Job instructions	Page enter text.
Preparation	Page enter text.
Information obtained	Page enter text.
Safety measures applied	Page enter text.
PPE	Page enter text.
Planning	Page enter text.
Method	Page enter text.
Testing and quality checks you completed	Page enter text.
Records and information	Page enter text.
Restored the area	Page enter text.
Handover and concluded the job	Page enter text.
Key learning points	Page enter text.
Organisational behaviours demonstrated	Page enter text.



#### Details of mentor or witnesses who will authenticate the examples of performance

Name	Position	Contact e-mail/Tel	Signature
enter text.	enter text.	enter text.	enter text.
enter text.	enter text.	enter text.	enter text.
enter text.	enter text.	enter text.	enter text.
enter text.	enter text.	enter text.	enter text.
enter text.	enter text.	enter text.	enter text.



# **Appendix 3: Portfolio Reference (Apprentice complete)**

Portfolio Evidence (PE)

Core Knowledge = CK, Core Skills = CS, Specific Knowledge = SK, Specific Skills = SS Behaviours = B

	Evidence		, Core Skills = CS, Specific Knowledge =SK, Specific Skills = SS Behav		
Completed		KSB	KSB statement	Assessment	
(√)	reference Click or tap	code		Method	
	here to enter	CK1	Safe and Professional working practices - including legislation, regulation,	PE	
	text.		industry procedures and safety requirements.		
	Click or tap here to enter	CK2	The general engineering principles - required to support the maintenance,	PE	
	text.		renewal and construction of the railway.		
	Click or ton	01/0	How to work effectively and contribute to engineering solutions - including	PE	
	Click or tap here to enter	CK3	awareness of the importance of 3 <sup>rd</sup> party requirement and the need to		
_	text.		understand and adhere to cooperate policies on ethics, equality and		
	Click or ton		diversity.		
	Click or tap here to enter	CK4	Awareness of commercial principles - applicable to the Railway and the	PE	
	text.		implications of these.		
		1	Core Skills (CS)		
	Click or tap	CS5	Keep themselves and others safe by adhering to safe working practices -	PE	
	here to enter text.		understand and comply with statutory regulations and organisational safety		
	toxt.		requirements, including safe access to work locations.		
	Click or tap	CS6	Prepare for high standard of technical work - gathering and interpreting	PE	
	here to enter text.		information including drawings, plans, and schedules needed for rail		
	lext.		engineering activities and prepare work location.		
			<b>Deliver a high standard of technical work</b> - undertake engineering activities	PE	
	Click or tap	CS7	in relation to maintenance, construction, installation and /or renewal of		
	here to enter	(3)	assets. Take responsibility for their own work on completing relevant		
	text.		integrity and compliance checks. Reinstate the work area engineering		
			activity.		
	Click or tap here to enter	CS8	<b>Identify and report problems</b> – identify, recognise and escalate appropriately	PE	
	text.		common problems.		
	Click or tap		<b>Use resources</b> – including the correct utilisation and storage tools, materials,	PE	
	here to enter	CS9	equipment and the lifting and moving of materials components and		
	text.		equipment.		
			Communicate effectively – use oral written, electronic and It based methods	PE	
	Click or tap here to enter	CS10	and systems for accurate communication, reporting and recording of		
	text.	6510	technical and other information, using correct terms, standards, templates		
			and certifications.		
			Pathway 1: Track		
	Click or tap		Track – understand the relevant tolerances for track installation, specific		
	here to enter	SK1	methods and techniques for track work instructions, hot water restrictions	PE	
	text.		and extreme weather plans.		
		SS1	Able to restore track geometry faults by manual repair of assets as part of a	PE	
	Click or tap		team. Under direction, restore plain line track geometry, rail switches and		
	here to enter		crossings, and where appropriate conductor rail systems, to operational		
	text.		condition and maintain the track and its environment including vegetation		
			and drainage.		
Pathway 2: Electrification					
	Click or tap	SK2	Electrification – understand electrical and electronic principles.	PE	
	here to enter text.	31/2			



Click or tap here to enter text.	SS2	Under direction: assist in maintenance and installation of railway electrification equipment and components; assist in isolation and earthing of electrical systems at different voltages and frequencies, working on live battery and inverter systems and maintaining plant.	PE
		Pathway 3: Overhead Lines	
Click or tap here to enter text.	SK3	Overhead Lines – understand mechanical principles and construction design.	PE
Click or tap here to enter text.	SS2	Follow instructions to assemble overhead line with detailed specification, using lifting and access equipment while working at heights.	PE
		Pathway 4: Signalling	
Click or tap here to enter text.	SK4	<b>Signalling</b> – understand function and characteristics of railway signalling systems, including electrical, electronic and mechanical principles.	PE
Click or tap here to enter text.	SS4	Under direction; install & wire signalling or control systems; install position and label equipment, components and cables correctly; undertake installation integrity checks; assist in testing of components and equipment in accordance with test specifications and plans; maintain and rectify signal control systems equipment.	PE
<u>'</u>		Pathway 5: Telecoms	
Click or tap here to enter text.	SK5	<b>Telecoms</b> – understand principles of electronic devices, circuits, data and communications equipment.	PE
Click or tap here to enter text.	SS5	Under direction undertake the activities of installations, planned preventative maintenance and maintenance testing activities on operational railway telecoms systems and establish compliance with drawings and specifications. Understand the types of operational constraints when carrying out telecoms installation and maintenance activities.	PE
		Pathway 6: Traction & Rolling stock (T&RS)	
Click or tap here to enter text.	SK6	<b>Traction &amp; Rolling Stock (T&amp;RS)</b> – understand vehicle design, construction, maintenance and operation.	PE
Click or tap here to enter text.	SS6	Under direction, carry out preventative and scheduled maintenance activities and follow vehicle maintenance instructions on T&RS mechanical, electrical, fluid power and electronic communication equipment including ensuring vehicle trim, ancillary equipment and fittings are secured and in good order, check subsystems are operating correctly. Assist with the installations of T&RS equipment.	PE
		Behaviours	
Click or tap here to enter text.	B1	Act professionally – demonstrating dependability, determination, honesty and integrity. Respect others, act ethically and contribute to sustainable development.	PE



	Click or tap		Be risk aware – so as to help reduce risks by checking of information,	PE
	here to enter	B2	concentration on the tasks and awareness of changing circumstances on	
	text.		activity.	
	Click or tap		Display a self-disciplined, self-motivated, proactive approach to work – able	PE
	here to enter	В3	to make independent decisions whilst knowing one's imitations and when to	
	text.		ask for help or to escalate.	
	Click or tap	B4	Work reliably and safely – occasionally without close supervision, to	PE
here to er text.			approved industry standards and safe working practices.	
	Click or tap here to enter text.	DE	Work effectively and efficiently, individually and as part of a team –	PE
		БЭ	maintaining effective relationships with colleagues, clients and suppliers	
	Click or tap		Receptive to feedback – willing to learn new skills and adjust to change.	PE
	here to enter	В6	Carrying out and record CPD necessary to maintain and enhance	
	text.		competence.	
	Click or tap	В7	Prepared to make a personal commitment – to their employer, the industry	PE
	text.	Б/	and its professional standards.	



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