

Bridge Inspector Certification Scheme Manual 2025



Bridge Inspector Certification Scheme (2025)

Scheme Manual

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Foreword

This certification scheme for bridge inspectors, entitled Bridge Inspector Certification Scheme – 2025 (BICS 2025), has been jointly developed by the UK Bridges Board, Transport Infrastructure Ireland and the Bridge Owners Forum.

The certification scheme has been recently improved, introducing a knowledge-based test and a condensed e-Portfolio using a modular approach to enable flexibility. Modules, applicable to all industry sectors have been developed, but the structure is such that specific additional modules, to accommodate the requirements of different sectors, organisations, and bridge types can be added, as and when required.

The benefits of this scheme may include:

- An international scheme (UK and Ireland) which will be used by highways, waterways and railway asset owners.
- Verification of knowledge and experience: This scheme will clarify the experience and skills required for bridge inspectors at the Inspector and Senior Inspector grades, and, new for 2025, the Associate Bridge Inspector grade. This will assist bridge owners in specifying the necessary skills, both internally and support improved levels of consistency in undertaking inspections, capturing defects, more informative and accurate inspection reports and better interpretation of results.
- The ability to better prioritise limited maintenance budgets as a result of greater consistency in the recommendations from bridge inspections.
- An increase in the profile/standing of bridge inspectors via the introduction of a nationally recognised scheme. The industry recognised levels of Inspectors would also provide a structured path for career progression, which would assist in staff retention and long-term capture of vital knowledge.
- Transferrable skills - increased flexibility for organisations in moving inspection staff around and sharing them with other sectors.

A structured approach to promote continued learning for trainee bridge inspectors, associate bridge inspectors, bridge inspectors, and senior bridge inspectors. Relevant industry developments and innovations can be identified and utilized in inspections

Please note that where the term ‘bridge’ or ‘bridges’ appears in this Manual that is deemed to cover transport infrastructure assets within the boundaries of the highway or which otherwise materially affect it, and also structures within the domain of rail, light rail and waterway sectors. These typically include bridges, footbridges, cycleway bridges, bridleway bridges, accommodation bridges, masts, post and columns, gantries and ancillary structures, subways, underpasses, culverts, retaining walls and cantilever road signs.

1. Introduction

This document should be read by the following:

- Bridge owners
- Trainee/uncertified inspectors
- Experienced inspectors wishing to become certified or renew their certification
- Mentors
- Assessors
- Anyone specifying or procuring inspections services
- Training providers

This document will help you to understand the new and improved 2025 **Bridge Inspector Certification Scheme** and will provide guidance on your role and responsibilities, as well as those who are available to support you through your journey to become a certified Bridge Inspector or to retain your certification. This document also contains useful reference material and templates to assist you in satisfying the required competencies.

1.1 Routes to Certification

The route to becoming a certified Bridge Inspector, and retaining certification, involves three key phases, which are:

- **Phase 1** - Achievement of the required knowledge-based test consisting of 50 questions with a pass rate of 80%
- **Phase 2** - Successful demonstration of the experience and skills documented in a BICS e-Portfolio
- **Phase 3:** For Bridge Inspectors, successful demonstration of experience (including direct personal participation, observation, actual knowledge, or contact) through an external review of the e-Portfolio. For Senior Bridge Inspectors, successful demonstration of proficiency (including leading, managing, challenging, decision-making, and adapting) through an external review of the e-Portfolio
- **Phase 4:** Successful substantiation of the experience and skills documented in a BICS e-Portfolio by way of an interview with one independent assessor and one member of Lantra staff
- **Phase 5:** Continued consolidation/broadening of experience

There are three levels of certified Bridge Inspector which are:

- **Associate Bridge Inspector (ABI)**
- **Bridge Inspector (BI)**
- **Senior Bridge Inspector (SBI)**

Trainee candidate entry level:

A brand new Trainee candidate entry level has also been introduced for Inspectors starting their Inspector career, working only under supervision. Candidates are issued with a trainee Inspectors e-Card and given free access to the BICS Community Hub to encourage networking with Inspector peers.

The three roles have been developed to reflect the current roles and responsibilities commonly adopted within the bridge inspection community and the new improved BICS 2025 routes to approval give structure category type recommendations for each level.

A non-certified category has been added for trainee bridge inspector candidates to encourage participation and progression through the routes once they have the relevant experience

The roles require certified inspectors to have the necessary competencies to undertake both detailed inspections, such as Principal Inspections, and General Inspections. The primary differences between the competence requirements for a Senior Bridge Inspector (SBI), Bridge Inspector (BI), and Associate Bridge Inspector (ABI) are that a Senior Inspector must demonstrate broader experience in relevant areas and have supervised others. This is reflected in the Achievement Rating definitions.

The **Bridge Inspector Certification Scheme, 2025** consists of seven Core Inspection units and three Modular Material units, which themselves each comprise of a number of sub-units. Outline descriptions of the subject material for each Core and Modular Material units are detailed in section C.1.2 and C1.3.

The Modular Material unit process was introduced as a change to the original scheme in response to trainee/uncertified inspectors who found it difficult to obtain the necessary experience in inspecting bridges constructed in all material types.

It will be necessary for a bridge inspector to pass the Core Inspection Units and at least one Modular Material Unit to become certified at the appropriate grade. If the bridge inspector has the necessary knowledge and experience, then it is possible for all three Modular Material Units to be reviewed at the same time.

The issued e-card will be endorsed with the Modular Material Units that have been passed by the bridge inspector at the appropriate grade.

1.2 Core Inspection Units

Unit C1 - Structural Mechanics

Span forms	C1.1	Describe the methodologies and considerations involved in inspecting structures with various span forms i.e. different span lengths, single and multiple span structures, arch structures etc.
Bridge elements	C1.2	Describe the methodologies and considerations involved in inspecting and reporting on the major bridge elements, including the superstructure, substructure, safety elements, durability elements, and ancillary elements?
Structural response to load	C1.3	Describe the methodologies and considerations involved in reporting issues relating to structural response to load in Primary and Secondary deck elements

Unit C2 – Planning and preparing for routine bridge inspections

Demonstrate your experience (BI) / proficiency (SBI) of planning and preparing for routine bridge inspections	
C2.1	Existing Records Review: Show how you reviewed a previous inspection report to understand the structure's condition, noting any historical issues, repair work, previous testing/investigations, or highlighted areas for reinspection. What did you identify?
C2.2	Pre-Inspection Notifications: Show evidence of sending necessary notifications to relevant stakeholders, such as local authorities, environmental agencies, Canal and River Trust, or nearby property owners, ensuring appropriate permissions for site access.
C2.3	Pre-Inspection Site Visit: Show how you conducted a preliminary visit to gather additional information, such as identifying hazard zones, access points, and current environmental conditions. Verifying the safety and accessibility of the structure for the upcoming inspection.
C2.4	Equipment and Safety Measures: List the necessary preparation undertaken: Personal Protective Equipment (PPE), data recording devices, and measuring tools (e.g., drones, laser scanners, moisture meters).

C2.5	<p>Environmental Consultation:</p> <p>If specialised concerns arose e.g. identifying potential impacts on local wildlife and ecosystems, how did you implement mitigation measures, like scheduling work to avoid nesting seasons or using noise-reduction techniques.</p> <p>Which experts such as suitably qualified engineers, ecologists, or conservation specialists did you seek guidance from.</p>
C2.6	<p>Specialist Access:</p> <p>Describe how you planned for the use of confined space techniques, rope access, specialist equipment, road space booking, track possessions, waterways access etc.</p>

Unit C3 - Health and Safety

Demonstrate your experience (BI) / proficiency (SBI) of application of Health and Safety	
C3.1	How have you followed legislation and codes of practice that are relevant to the inspection of structures.
C3.2	How have you had to minimise health and safety risks to the public and others who may be affected by the inspection work activities
C3.3	How have you had to minimise health and safety risks to those actually carrying out the works.
C3.4	How did you prepare and implement effective method statements and risk assessments.
C3.5	How did you apply safe systems of work and list the range of personal protection equipment (PPE) you used

Unit C4 - Inspection Reporting

Demonstrate your experience (BI) / proficiency (SBI) of accurate inspection reporting	
C4.1	<p>Recording Defects Accurately:</p> <p>Describe the importance of recording defects accurately in terms of location, type, severity, extent, and cause</p>
C4.2	<p>Level of Detail Depending on the Type of Inspection:</p> <p>Explain the level of detail that needs to be recorded depending on the type of inspection (e.g., routine, detailed, emergency). Provide examples of how the required detail varies and why it is important to tailor the recording process to the inspection type. (e.g. GI, PI, Safety, Inspection for Assessment)</p>

C4.3	<p>Recording Headroom Clearances: Describe the importance of recording headroom clearances during appropriate inspections. Provide examples of situations where accurate headroom measurements were critical to ensuring safety and compliance.</p> <p>Show evidence of the importance of taking accurate site notes.</p>
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Unit C5 - Identifying and understanding Defects

Demonstrate your experience (BI) / proficiency (SBI) of understanding and describing defects	
C5.1	<p>Describe the implications of inadequate structural capacity, particularly instances where a structure was too weak to withstand the applied loads due to design flaws, overloading, or deterioration in material strength?</p> <p>Relate this to an inspection you have undertaken.</p>
C5.2	<p>Describe the consequences of substandard clearance, particularly instances where vehicles have collided with overbridges due to insufficient headroom?</p> <p>Relate this to an inspection you have undertaken.</p>
C5.3	<p>Environmental actions</p> <p>Describe the impacts of environmental actions, including naturally occurring events such as flooding, scour, high winds, and temperature extremes, on structural integrity and functionality?</p> <p>Relate this to an inspection you have undertaken.</p>
C5.4	<p>External actions</p> <p>Describe the impacts of external actions, including accidental events such as vehicle collisions and deliberate events such as vandalism?</p> <p>Relate this to an inspection you have undertaken. such as vandalism.</p>
C5.5	<p>5. Consequences of Defects to Structural Components</p> <p>Describe the consequences of defects to structural components, particularly instances where the loss of functionality of individual elements (e.g., bearings, drainage, expansion joints) affected other parts of the structure? For example, how did the failure of water management systems impact the elements of the substructure and other parts of the structure?</p> <p>Relate this to an inspection you have undertaken.</p>

Unit C6 - Interpersonal Skills, behaviours, and Communication skills

Demonstrate your experience (BI)/ proficiency (SBI) as appropriate by describing your skills in the following areas	
C6.1	Practical Aptitude Skills Provide examples demonstrating your practical aptitude skills, particularly instances where you made sound and prudent judgments that resulted in: <ul style="list-style-type: none"> - Reduction in health and safety risks - Savings in time and/or money - Meeting deadlines
C6.2	Communication Skills Provide examples of demonstrating your communication skills, particularly instances where you have successfully engaged with third parties and the general public? Specifically, describe how you have communicated findings from an inspection, such as making your manager aware of defects or the need to carry out urgent works.
C6.3	Decision Making Skills: Provide examples demonstrating your decision-making skills, particularly in determining and setting priorities? For instance, describe how you have scheduled and prioritised a group of inspections or prioritised which components to inspect during a limited road or rail possession. Additionally, provide examples of instances where you had the confidence to challenge a situation or decision, such as questioning a method statement or the findings of a previous inspection.

Unit 7 - Access Requirements

Demonstrate your experience (BI) / proficiency (SBI) of working in these environments	
C7.1	Describe your experience in utilising access equipment during structural inspections, including the types of equipment used and the specific contexts in which they were employed?
C7.2	Describe your experience with the challenges encountered in accessing traffic management systems, including any specific difficulties faced and how they were addressed?
C7.3	Describe your experience in working at height, including the specific challenges faced and the safety measures implemented?

C7.4	Describe your experience in working adjacent to water, including the specific challenges faced and the safety measures implemented?
C7.5	Describe your experience in working adjacent to railways, including the specific challenges faced and the safety measures implemented?
C7.6	Describe your experience of working in confined spaces, including the specific challenges faced and the safety measures implemented?

1.3 Modular Material Units

Masonry Defects

Demonstrate your experience (BI) / proficiency (SBI) of defects in Masonry Structures	
MAS1	<p>Movement and Overloading: Show how you identified defects associated with the impacts of movement and overloading affecting structural integrity, particularly focusing on:</p> <ul style="list-style-type: none"> - Settlement of the foundations - Traffic loads of a masonry arch - Loads exceeding the capacity of a masonry retaining wall or spandrel
MAS2	<p>Material Properties: Show how you identified defects caused by the nature of the material, for example defects due to aging, weathering, erosion, vegetation, loading, sub zero temperatures etc. Consider different types of masonry for example, ashlar blocks, bricks, random rubble, hard and 'soft' masonry units</p>
MAS3	<p>Unsympathetic Maintenance: Show how you identified defects caused by unsympathetic maintenance techniques, for example incorrect mortar repairs</p>

Concrete Defects

Demonstrate your experience (BI) / proficiency (SBI) of defects in concrete structures	CON1	<p>Movement and Overloading:</p> <p>Show how you identified defects associated with the impacts of movement and overloading affecting structural integrity, e.g:</p> <ul style="list-style-type: none"> - Differential settlement across the foundations of a mass or reinforced concrete abutment, including the resulting defects in the abutment and potential defects in a reinforced concrete deck slab supported by the settled abutment. - Damage caused by traffic loads on a reinforced concrete bridge deck.
	CON2	<p>Material Properties:</p> <p>Show how you identified defects associated with the impact of material properties affecting structural integrity, e.g.:</p> <ul style="list-style-type: none"> - Defects caused by the nature of the material, such as aging, weathering, erosion, vegetation, loading, and sub-zero temperatures, with consideration of reinforced concrete (RC) and mass concrete. - Traffic loads exceeding the capacity of a reinforced concrete bridge deck. - Chemical processes, such as alkali-silica reaction (ASR) and thaumasite sulphate attack (TSA).
	CON3	<p>Construction defects:</p> <p>Show how you have identified defects that have arisen during the construction process and their subsequent effects on the structure?</p>
	CON4	<p>Non Critical Defects:</p> <p>Show how you identified non-critical defects in concrete structures, particularly minor defects that primarily affect the visual appearance and do not warrant maintenance?</p>

Metallic defects

Demonstrate your experience (BI) / Proficiency (SBI) of defects in metallic structures	
MET1	Movement and Overloading:

	Show how you have identified defects in steel structures that are caused by movement or overloading? Provide specific examples of any such defects you have identified and the steps you took to report them.
MET2	Material Properties: Show how you have identified defects in steel structures that arose due to the inherent properties of the material, such as corrosion? Provide examples of how you recognised these defects.
MET3	Accidental or Deliberate Damage: Show how you have identified defects in steel structures that resulted from accidental or deliberate damage? Provide examples of incidents where you recorded such damage.
MET4	Fabrication Errors: Show how you have identified defects in steel structures that arose due to fabrication errors, such as poor quality welds? Provide examples of how you identified these issues.

1.4 Existing Inspectors

In 2025, the BICS e-Portfolio was revised to adopt a holistic approach, drawing from the inspectors' own experiences. It is written in a prescriptive manner to ensure inspectors are thoroughly guided in answering the modules and sub-modules.

It is anticipated that the majority of existing inspectors will be able to demonstrate adequate knowledge and experience to meet the requirements of the Core Inspection Units and Modular Material Units by utilising their experience to date, or they may only need to supplement their skills in a number of targeted areas. The Units have not been designed to 'catch you out' but enable you to demonstrate that you have the necessary skills to undertake your role effectively and consistently. If an inspector has limited experience in inspecting one particular material type, then they may apply for certification to cover the other material types where they have more experience.

1.5 People to Help You

People who can support you in achieving the skills and experience required to satisfy the Core inspection and Modular Material units include your Mentor, who may be a colleague employed by the same Company or a different Company, if appropriate, as well as the Scheme Administrator.

Each of them fulfils a different role and they will support your review of your personal experience, as well as assisting you in the planning of your continuing professional development, so as to meet the necessary requirements.

2 Scheme Parties

2.2 Different Roles

The **Bridge Inspector Certification Scheme 2025** has a number of different parties who undertake complementary roles. These roles include:

- Bridge/Uncertified Inspector
- Mentor
- Employer
- Assessor
- Scheme Administrator

2.3 Roles and Responsibilities

Trainee/Uncertified Inspector

The role of the trainee/uncertified Inspector is to ensure that he/she fully understands, and is able to demonstrate their ability to carry out work to the requirements as specified in the Core Inspection Units and the selected Modular Material Units, whilst continuing to undertake bridge inspections under supervision.

The responsibilities of a trainee/uncertified Inspector are to:

- Familiarise themselves with the criteria laid down in the Core Inspection and Modular Material Units
- Understand the achievement ratings required to satisfy the Core Inspection and Modular Material Units
- Have an overview of the operation of the **Bridge Inspection Certification Scheme 2025**

**DOC-HAP-009 - Bridge Inspector Certification Scheme
Manual 2025**

- Successfully complete the **Bridge Inspection Certification Scheme 2025** Knowledge based test (Associate Inspector and Bridge Inspector levels only)
- Complete the **Bridge Inspection Certification Scheme 2025** e-Portfolio
- Identify unit criteria requiring further knowledge/experience
- In conjunction with a Mentor (if assigned by the employer), outline a development action plan to achieve the outstanding unit criteria
- Organise regular meetings with Mentor (if assigned by the employer) to review progress
- Submit e-Portfolio and accompanying evidence to Lantra
- Undertake appropriate advance preparation and attend external **Bridge Inspection Certification Scheme 2025** interview (arranged by Lantra)
- Undertake relevant continuing professional development and record it accordingly
- Undertake reassessment at appropriate time to maintain certified inspector status

Employer / Mentor

The role of the Employer is to proactively support a trainee/uncertified Inspector and to facilitate the opportunities for him/her to gain the knowledge and experience necessary to achieve the required levels. It is assumed that a trainee/uncertified Inspector's Mentor will usually be an experienced colleague from the same organisation. Although the role of Mentor is encouraged, it is not a mandatory requirement, but it is beneficial.

The responsibilities of an Employer are:

- Appoint (internally or externally) an appropriate Mentor for the trainee/uncertified Inspector

The responsibilities of a Mentor are:

- Undertake an initial meeting with Inspector to provide an overview of the **Bridge Inspection Certification Scheme 2025**
- Review the knowledge and experience of trainee/uncertified inspectors to ensure they are ready to take the BICS knowledge-based test and provide advice on how to prepare for the test.
- Following successful completion of the BICS Knowledge Based Test, assist trainee/uncertified Inspector with completing the e-Portfolio
- Support trainee/uncertified Inspector with the drafting of an outline development action plan to achieve the outstanding unit criteria
- Attend regular review meetings with trainee/uncertified Inspector to check on progress
- Undertake internal review of trainee/uncertified Inspector's completed e-Portfolio
- Support trainee/uncertified Inspector with advance preparation for external interview
- Provide on-going support/guidance to Inspector post certification.

Assessor

The role of the Assessor is to review and verify whether a trainee/uncertified Inspector can demonstrate their knowledge and experience laid down in the Core Inspection and Modular Material Units. This will be undertaken through a review of the evidence presented in the candidate's submitted e-Portfolio and the external interview.

The responsibilities of an Assessor are:

- Review submitted e-Portfolio and verify whether sufficient evidence has been provided to demonstrate that the Core Inspection and Modular Material Units have been satisfied
- Undertake an interview with the candidate
- Confirm whether a candidate has met the requirements to achieve certified Inspector status. (Inspector or Senior Inspector, as appropriate)
- Provide feedback to Lantra for unsuccessful candidates, outlining areas where they have failed to demonstrate adequate awareness, knowledge, experience and proficiency as appropriate to the level
- Undertake appeals and re-examination interviews, if required (Lead Assessor only).

Scheme Administrator

The role of the Administrator is to maintain the **Bridge Inspector Certification Scheme** and to advise and support the candidates through the certification process.

The responsibilities of the Administrator are:

- Maintain website for the scheme
- Maintain BICS Community Hub for the scheme
- Maintain scheme templates and update as necessary
- Arrange Knowledge-Based Tests for Candidates.
- Process submitted completed e-Portfolios and allocate Assessor
- Arrange external interviews
- Issue e-cards to successful candidates
- Forward feedback to unsuccessful candidates
- Arrange re-examination/appeals, as required
- Maintain database
- Consult with selected stakeholders and undertake six monthly reviews as required and report recommendations to UKBB.

3 Inspector Levels

3.2 Inspector Levels

Certification via the **Bridge Inspector Certification Scheme 2025** can be awarded at one of three levels (see definitions):

- Associate Inspector
- Inspector
- Senior Inspector

There are different attributes for each level which need to be demonstrated through the capture of evidence and an external interview. Deciding which level is most appropriate for you will depend upon your experience to date and your current role. This decision will most likely be taken following discussions with your Employer/Mentor. He/she should be able to advise you on the most suitable route, in light of your current experience and the experience you will realistically be able to gain in the near future.

3.3 Competencies

As outlined in Section 1.2, the scheme consists of five Core Inspection Units and three Modular Material Units each containing the necessary sub-units required for achieving inspector certification (see Table One). Details of the assessment criteria for each sub-unit at both Inspector levels are detailed in 1.2. The required achievement rating to satisfy the unit adequately depends upon the inspector level you wish to attain. Further details on the achievement ratings are given in the following section.

3.4 Achievement Ratings

The achievement rating describes the level of knowledge and experience required for a specific level. There are four ratings, which are listed below:

- **A** – Awareness
- **K** – Knowledge
- **E** – Experience
- **P** – Proficiency

The first two ratings demonstrate the level of **theoretical knowledge** which you require in order to satisfy the unit requirements and are assessed in the knowledge-based test. The latter two require a candidate to have had appropriate **practical experience** and are assessed from evidence provided in the BICS e-Portfolio in conjunction with the theoretical knowledge, in order to satisfy the unit requirements.

Detailed descriptions of the nature of the skills required to satisfy each of the achievement ratings are detailed in Table Two.

Table One – Core Units

Ref	Unit Description
Unit C1	Structural Mechanics
C1.1	Span Forms
C1.2	Bridge Elements
C1.3	Structural response to load
Unit C2	Planning and preparing for routine Bridge Inspections
C2.1	Existing Records Review
C2.2	Pre-Inspection Notifications
C2.3	Pre-Inspection Site Visit
C2.4	Equipment and Safety Measures
C2.5	Environmental Consultation
C2.6	Specialist Access
Unit C3	Health and Safety
C3.1	Legislation and Codes of Practice
C3.2	Health and Safety Risks - Public
C3.3	Health and Safety Risks - Workers
C3.4	Prep and Implementation
C3.5	Safe Systems and PPE
Unit C4	Inspection Reporting
C4.1	Recording Defects Accurately
C4.2	Level of Detail Depending on the Type of Inspection
C4.3	Recording Headroom Clearances
Unit C5	Identifying and understanding Defects

C5.1	Inadequate structural capacity
C5.2	Substandard clearance
C5.3	Environmental actions
C5.4	External actions
C5.5	Consequences of Defects to Structural Components
Unit C6	Interpersonal Skills, behaviours, and Communication skills
C6.1	Practical Aptitude Skills
C6.2	Communication Skills
C6.3	Decision Making Skills
Unit C7	Access Requirements
C7.1	Show evidence of utilising access equipment
C7.2	Show evidence of difficulty accessing traffic management
C7.3	Show evidence of working at height
C7.4	Working adjacent to water
C7.6	Show evidence of working adjacent to railways
C7.7	Show evidence of working in confined spaces
Unit MAS	Masonry Bridge
MAS.1	Movement & Overloading
MAS.2	Material Properties
MAS.3	Unsympathetic Maintenance
Unit CON	Concrete Bridge
CON.1	Movement and Overloading
CON.2	Material Properties
CON.3	Construction Defects
CON.4	Non-Critical Defects

Unit MET	Metallic Bridge
MET.1	Movement and Overloading
MET.2	Material Properties
MET.3	Accidental or Deliberate Damage
MET.4	Fabrication Errors

3.5 Table Two – Achievement Ratings

Achievement Rating		Description	
A	Awareness	General understanding of the unit requirement including an appreciation of its relevance.	<i>These apply to theory only</i>
K	Knowledge	Knowledge and understanding of the unit requirement with an ability to demonstrate its relevance/application.	
E	Experience	Knowledge, understanding and experience of undertaking the unit requirement.	<i>These apply to practical application, as well as theory</i>
P	Proficiency	Knowledge, understanding and experience of undertaking the unit requirement and competent to advise others .	

3.6 Theoretical v Experience

It is appreciated that a number of the units can be achieved solely through background reading and/or courses. These are the areas where it is felt that the skill required does not necessitate practical experience but is adequately achieved by a candidate extending his/her theoretical knowledge. However, there are areas where practical experience is deemed to be necessary to successfully achieve the required level. Consequently, units requiring achievement ratings of 'E' or 'P' compel a candidate to demonstrate practical experience or proficiency in order to satisfy the unit.

3.7 Specialist Material Modules

In addition to the Core Inspection Units, a candidate will be required to satisfy the unit requirements in at least one Modular Material Unit in order to become a certificated inspector. Some bridge owners may require Inspectors to satisfy the unit requirements of more than one material type.

4 Scheme Operation Uncertified Inspector

4.2 Getting Started

The **Bridge Inspector Certification Scheme 2025** requires the uncertified inspector to provide evidence for the Core Inspection Units and at least one Modular Material Unit by completing first the BICS Knowledge Based Test followed by completing their e-Portfolio and supplying the relevant evidence.

It is expected that your employer will be committed to providing support, expanding your knowledge and expertise through enabling you to undertake suitable work experience, appropriate training, as well as providing you with Mentor(s) support on an individual basis. Similarly, you will be committed to work to the best of your abilities, through planning and capturing and recording your evidence, arranging regular meetings with your Mentor and ensuring that your continuing professional development (CPD) is maintained.

It is not a requirement to attend training courses. However, these may be of some use for a new trainee to gain knowledge or for a more experienced inspector to supplement their knowledge. You should learn through direct experience of working in teams, both in the office and on site. You will also have the opportunity to develop your knowledge and understanding in discussion with your colleagues and in regular reviews with your Mentor (if allocated by your employer).

The achievement of becoming, and remaining, a Certified Inspector through the **Bridge Inspector Certification Scheme** can be broken down into three phases. These phases are now outlined in more detail below:

4.3 Phase 1 – Achievement of Units

Initial Administration

The initial tasks involved in embarking on the **Bridge Inspector Certification Scheme** include the following activities:

- Agreement with your Employer
- Registration with the Scheme Administrator (Lantra)
- Allocation of Mentor (optional)
- Review of experience to date
- Decision as to which Certification Route is most appropriate (i.e. Inspector or Senior Inspector) and for which material type(s)
- Completion of e-Portfolio
- CV and a summary of structures worked on in the last 12 months
- Submission of e-Portfolio to Scheme Administrator (Lantra).

Previous Relevant Experience – Knowledge-Based Test

Relevant experience gained prior to embarking on the **Bridge Inspector Certification Scheme** can be recorded as evidence towards achievement of the Units. This may be particularly relevant to many of those who have been carrying out inspections for some time. As a priority, it is prudent to familiarise yourself with the content of the Units in order that you can decide where you may need additional support and further learning.

Once you have successfully undertaken a Knowledge-Based Test, the next step is to record the relevant evidence from your experience into the e-Portfolio, in order that it can be reviewed by your Mentor (if required). It is envisaged that your Mentor (optional) will assist you in undertaking this task.

Completion of E-Portfolio

It is essential to record adequate evidence in your e-Portfolio to demonstrate that you have the necessary skills to meet each unit criteria. Specific and personalised evidence is important. The e-Portfolio will be assigned to you by Lantra and will be accessible on receipt of payment (see www.bridge-inspectors.com).

Once you have completed your e-Portfolio in all of the relevant Units, and they have been checked by your Mentor (optional) as demonstrating the required attainment level, you and your mentor will agree whether you are ready to submit your e-Portfolio to Lantra for review. On submission of the e-Portfolio, Lantra will appoint an Assessor to undertake a review of the completed e-Portfolio.

4.4 Phase 2 – External Review

E-Portfolio Sign-Off

In order for the Assessor to be able to sign off your e-Portfolio, they need to see evidence that you have the necessary skills listed in the assessment criteria at the required achievement rating. As explained in section 3.3, achievement rating levels 'A' and 'K' require theoretical knowledge, which can be achieved through background reading or through courses etc., whereas achievement rating levels 'E' and 'P,' require you to have had practical experience. Appropriate evidence needs to be provided for all relevant rating levels. Successful completion and sign off of the e-Portfolio by an assessor is mandatory in order to progress to external interview.

If you are unsuccessful in satisfying the requirements of the external Assessor at e-Portfolio sign-off stage, there is the opportunity of re-submitting the e-Portfolio at a later date.

External Interview

All candidates who wish to become certified via the **Bridge Inspector Certification Scheme 2025** will be required to have an external interview with one Lantra representative and one Lantra approved Assessor. An interview will only be offered on achieving successful sign off of the e-Portfolio. The interview will consist of a range of questions in order that the Assessor can satisfy themselves that you have the necessary knowledge and experience. The level required will depend upon which certification level (i.e. either Inspector or Senior Inspector) you have submitted your application for.

Certification

If you successfully demonstrate that you have achieved the required level, you will then be awarded certified inspector status. Each candidate will receive a Lantra e-card clearly stating the achieved inspector status (i.e. either Inspector or Senior Inspector) for each material type and the time period for which it is valid.

If you are unsuccessful in satisfying the requirements of the external Assessors at interview stage, there is the opportunity to apply to be re-interviewed at a later date. The route to a second interview would be dependent on the feedback received from the Assessors. Appeals can be made on an administration basis only and not on technical content.

4.5 Phase 3 – Continued Consolidation/Broadening of Experience

CPD

Achievement of Certified Inspector status is not the end of your journey. You are required to maintain a record of your Continuing Professional Development (CPD) in order to demonstrate how you are keeping up-to-date and maintaining your levels of competence.

Renewal Process

Annual Re-Registration

There is a requirement for the Certified Inspector/Senior Inspector to renew their registration annually. On or before annual re-registration in April, Lantra will request evidence of up-to-date CPD and the annual registration fee will be applied.

Term of Certification

Certification will last for a period of 3 years at which point your e-card will expire. Certified Inspectors/Senior Inspectors must renew their certification via Lantra by:

- Providing up to date CPD within their e-Portfolio for review by Lantra
 - Lantra checks the currency of CPD prior to annual renewal of membership
 - Assessor reviews relevance of CPD
- Re-assessment interview (if required)

5 Scheme Operation - Employer

5.2 Mentor Assignment

The role of an Employer is to proactively support a trainee/uncertified Inspector and to facilitate opportunities for him/her to satisfy the required units and hence achieve certified status. The primary means by which this may be implemented is through the allocation of an appropriate Mentor to the trainee/uncertified Inspector.

Initial responsibilities of a Mentor are to assist a trainee/uncertified inspector with the completion of their e-Portfolio, undertake a review and capture their experience to date and subsequently draft an outline action plan to assist the trainee with understanding how they can achieve the outstanding unit criteria.

5.3 Progress Monitoring

The role of the Mentor is to attend regular meetings arranged by the trainee/uncertified Inspector to review progress. Progress will be monitored through discussions with the trainee in conjunction with reviews of their e-Portfolio. The Mentor will be responsible for providing constructive feedback on the trainee's submitted material, so as to guide them for e-Portfolio submission and interview.

5.4 Mentor Review

A Mentor will provide feedback to the uncertified Inspector for the units at the appropriate level and confirm that they are ready to undertake an external review by a Lantra approved Assessor.

5.5 Post Certification Support

A Mentor's role does not finish once the candidate successfully achieves certified status since, if they have achieved Certified Inspector status, they may wish to progress to Senior Inspector in due course. Even those of you who have achieved Senior Inspector status still require on-going support to ensure that they are regularly challenged to question their own on-going competence levels. Previous bridge collapses clearly highlight that the industry cannot afford to become complacent with regards to the competence of bridge inspectors.

6 Scheme Operation - Assessor

6.2 The Role of an Assessor

The key role of the Assessor is to assess the suitability of candidates to become Certified Inspectors. They will fulfil this role through undertaking a review of the evidence presented to them in the candidate's e-Portfolio, prior to a 'face-to-face' or 'on-line' interview with the candidate.

Assessors must meet the requirements of the Scheme Administrator (Lantra) and the technical standard requirements as set by the **Bridge Inspector Certification Scheme**.

7 Assessor Registration

8 New applicant Assessor Criteria:

Approval criteria	Evidence requirement
Industry experience for the scheme	<p>Provide a competency-based Curriculum Vitae showing that the applicant has the relevant industry experience and knowledge</p> <p>Provide a written statement evidencing what you can bring to the role of a BICS Assessor</p>
Must be a Certified Senior Bridge Inspector	<p>Attend and pass an interview conducted by a Lantra approved Lead BICS Assessor</p> <p>Undertake a candidate interview under the supervision of the Lead Assessor showing competency as an Interviewer.</p>

- 9 All Assessors will be expected to attend a standard-setting event (SSE) every three years to maintain their status as Lantra-approved Assessors, ensuring consistency across all Assessor decisions.

Responsibilities

The responsibilities of a Bridge Inspector Assessor include the following key tasks:

- Review the e-Portfolio submitted by the candidate and verify whether sufficient evidence has been provided to demonstrate that the units laid down in the scheme have been achieved to the appropriate level
- Ensure that all evidence is clearly documented and precise
- Undertake an interview with the candidate (see Lantra QA process)
- Confirm whether a candidate has met the requirements to achieve certified Inspector status (Inspector or Senior Inspector, as appropriate)
- Provide a written report on the outcome of the assessment (see Lantra QA process)
- Lantra to feedback report outcomes to candidates. Where candidates have been unsuccessful the report will identify where they have failed to demonstrate adequate competence and advise next steps
- Participate in Appeals, if required.

All assessment records must be retained by Lantra for 7 years. Lead Assessors and Lantra retain the right to review and counter check any assessment reviews.

Additional responsibilities of a Bridge Inspector Assessor:

- Maintain up to date knowledge of the industry
- Provide evidence of updated CPD at annual re-registration.

Guidelines

Additional advice is given in the Assessor Guidance document which is issued to all Assessors as part of the Standardisation Event.

9.2 The Role of the Lead Assessor

The role of the Lead Assessor, in addition to the above criteria, is to support Lantra in the following activities:

- Assisting with scheme documentation
- Appointing Assessors
- Ensuring Assessors are supported in meeting the required standards
- Assisting in Assessor Standardisation Events
- Scheme Operation – Scheme Administrator

9.3 Administration

The role of the Scheme Administrator is to maintain the **Bridge Inspection Certification Scheme** and to ensure that all parties fulfil their roles and are provided with the necessary tools to do so. The role is currently undertaken by **Lantra**. To summarise, the Scheme Administrator is responsible for the administrative tasks involved in ensuring the smooth running of the scheme.

The primary day-to-day tasks include:

- Maintenance of website for the scheme
- Maintenance of scheme templates
- Processing of submitted e-Portfolios
- Appointment of Assessors
- Allocation of Assessor activity
- Arranging of external interviews
- Production and forwarding of Inspector and Senior Inspector e-cards to successful candidates
- Forwarding feedback to unsuccessful candidates
- Arranging re-examination/appeals, as required
- Maintenance of BICS database
- Maintenance of scheme manuals
- Secretariat for BICS Committee

9.4 Continuous Improvement

In conjunction with those tasks listed in Section 7.1 above, the Administrator and the BICS Committee are responsible for regularly challenging the processes involved in running the scheme to ensure that any necessary improvements are acted upon. The Administrator is responsible for implementing any improvements/amendments and for ensuring that any associated documentation is updated accordingly.

9.5 Liaison with the UK Bridges Board (UKBB)

A further role for the Administrator involves liaison with selected stakeholders and the organisation of periodic reviews, as required, to report recommendations to the UKBB. These may lead to subsequent updates needing to be published. It is the role of the Administrator to ensure that these are undertaken.

9.6 Assessors Register Owner

In order to allocate suitable Assessors to candidates the Scheme Administrator shall own and maintain the Assessors Register. The information which shall be recorded includes:

- Names of individuals who have successfully completed the Assessor Standardisation Event
- Details of the number of 'shadowed' interviews which an individual has undertaken
- Notification from Lead Assessor of a trainee Assessor having successfully completed his 'trial period.' This will be the individual's registration date.
- Date of refresher training required for each registered Assessor.

9.7 Inspectors Database

The Scheme Administrator shall ensure that the Certified Inspector Database is maintained at all times.

10 Definitions

Achievement Rating	This is the level of knowledge (and experience, if appropriate), required to satisfy a defined scheme unit.
Administrator	This is the body which is responsible for the day-to-day running and maintenance of the Bridge Inspection Certification Scheme.
Assessor	This is a Lantra approved individual who verifies whether a candidate is able to demonstrate the required level, through a review of their submitted e-Portfolio and an external interview.
Competence	This is the attainment of knowledge skills and abilities at a level of expertise sufficient to be able to perform in an appropriate work setting.
Core Inspection Units	A set of assessment criteria which are deemed to be fundamental to attaining Bridge Inspector Certification.
Employer	This is the person or company who commits to supporting a Trainee Inspector, both technically and financially through the process for becoming certified under the Bridge Inspection Certification Scheme.
E-Portfolio	This is the tool used to capture details of the knowledge and experience attained in order to satisfy the required Achievement Rating.
Knowledge-Based Test	This is a knowledge-based test that each candidate undertakes before being issued an e-Portfolio.

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Lead Assessor	This is the individual who oversees or 'shadows' an Assessor during their 'trial period,' before they become registered. This individual assists the Administrator in the operation of the Scheme
Inspector	Both certified Inspectors and Senior Inspectors are expected to demonstrate the necessary knowledge and experience to undertake Principal Inspections, General Inspections, and Acceptance Inspections
Mentor	This is the individual who supports a Trainee Inspector on a 'one-to-one' basis.
Modular Material Units	These are the material assessment criteria at least one of which is deemed to be fundamental to attaining Bridge Inspector Certification
Senior Inspector	Senior Inspectors are expected to have more experience and have inspected a broader range of structures; they are also expected to have advised others on the inspection process, recording of findings, causes of defects and recommendations for repairs.
Specialist Competencies	These are Competencies which are deemed not to be mandatory in order to become a Certified Inspector, but which may be required by some bridge owners. They include, typically, industry specific knowledge, specialist material knowledge and/or experience and specialised access requirements.
Trainee/Uncertified Inspector	This is the title given to an inspector prior to attaining certification.