COMPETENCY, QUALIFICATIONS AND TRAINING STRATEGY AND PLAN

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Contents

Document Information

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1.   Introduction

This strategy sets out the approach that the Council as the Highway Authority will put in place to ensure its highway services continue to be delivered by able, competent and appropriately qualified staff to ensure high standards are maintained. It provides a framework and process to ensure that all staff engaged by the Council to work in highways associated services are:

- Able, competent and qualified to deliver the work they are engaged upon
- Provided with opportunities to develop their competencies through relevant training, development and routes to qualifications
- Compliant with the council's competency tests where appropriate
- Supportive of a framework for staff retention and the promotion of opportunities and succession planning to manage business continuity

The strategy looks at the drivers behind establishing an effective approach to competencies, training and qualifications in terms of:

- What competency means
- Why it's important
- Competency frameworks
- Assessing employees against a competency framework, whilst assisting in professional accreditation
- The risks of identifying staff as not competent and how to address this

The strategy also considers the development of generic and specific competency frameworks as well as a process for identifying, managing and developing competencies.

Defining the competencies to be assessed in a competency framework model requires several questions to be addressed.

- How do we know the staff member is competent to undertake the job?
- How do we know what to measure?
- Is formal education a reliable and adequate measure of competence?

- Is on-the-job training or years of experience a more effective measure?
- Do personal characteristics hold the key to effective outcomes?

The document also looks at the development progression for each post and along with a competency framework, provides a route to accreditation with an appropriate institution or national body. This is covered in the Training Programme section.

All these things are important, but no one competency describes an ideal set of behaviours and traits needed for any role. Nor do they provide an assurance that they will ensure the standards and levels required by the organisation will be delivered.

A more complete way of approaching this is to link individual performance to the goals and objectives of the service. To do this, many organisations use 'competencies' to demonstrate the integrated knowledge, skills, judgment, and attributes that people need to perform a job effectively. By having a defined set of competencies and responsibilities for each role in the highways team, it shows the kind of behaviours that are required from each team to help achieve its objectives. Not only can team members work more effectively and achieve their full potential, but there are many business benefits to be had from linking personal performance with corporate goals and values.

Defining which competencies and aligning the appropriate levels of accountabilities are necessary for the overall success for the highways team, and will help achieve the following:

- Ensure that staff demonstrate sufficient expertise
- Ensure staff understand their responsibilities to deliver the role effectively
- Recruit and select new staff more effectively
- Evaluate performance more effectively
- Identify skill and competency gaps
- Provide more customised training and professional development
- Plan effectively for staff retention and succession
- Make change management processes work more efficiently

2. Drivers

For the Councils Highways Asset Management purpose, the competency driver requirements and direction are denoted in the Highways Code of Practice, the HIAM Guidance Document, and the UKRLG Asset Management Competence Framework and it was a component of the DfT Incentive Fund self-assessment process.

However for the betterment of the overall service, this document also acts as plan for training requirements across all services within Highways & Sustainable Transport (H&ST) service area, taking in several frameworks across different roles.

Code of Practice - Well Managed Highways Infrastructure

Recommendation 15 – Competencies and Training:

The appropriate competencies for all staff should be identified. Training should be provided where necessary for directly employed staff, and contractors should be required to provide evidence of the appropriate competencies of their staff.

Highway Infrastructure Asset Management Guidance Document

Recommendation 10 - Competencies and Training

The appropriate competency required for asset management should be identified, and training should be provided where necessary.

UKRLG Asset Management Competence Framework

This document contains an Asset Management Competence Framework designed to help highway authorities implement the recommendations of the CoP, with particular focus on Recommendation 15 – Competencies and Training.

Department of Transport Incentive Fund 19/20

Question 7 – Has your local authority identified the appropriate competencies required for highway infrastructure asset management and what training may be required?

2.1. Competency

A competency is more than just knowledge and skills, it is also about application and delivery. Competency is effectively an assessment of capability so if someone has competency in something, they are able and qualified to apply it and do it. Competency is often defined, measured and used to mean someone has an appropriate qualification and it is therefore assumed that if they pass exams and are awarded a certificate then they have competency, this however may not necessarily be the case and it forms only part of the competency requirements and test. Most jobs require some levels of competency, either through certification, and/or on-the-job training and performance. However, it is also a balance of skills and knowledge that lead to an effective performance criterion, which should comprise of a series of measurable skills, abilities and personal effectiveness that identify the capability of employees against defined roles within an organisation.

The highway's team's ability to invest in competent staff is related to the quality of the competencies they have developed, promoted, and applied. By investing in the competency of staff engaged in service delivery this enables the Council to deliver quality and reliable services that meet the business and operational demands of the service reflective of the Council's corporate goals, objectives and values.

The Competencies are broadly aligned as below:

1. For Highway Engineers, Planners and Technicians, this will be linked to the Engineering Council's "The UK Standard for Professional Engineering and Competence and Commitment'" document (4th edition).

2. For Highway Inspectors, this will be UK Roads Liaison Group, Highway Competency Framework.

3. For the Asset Management Team this will be linked to the UK Roads Liaison Group, Asset Management Framework.

4. For Street Works Inspectors, this will be The Institute of Highway Engineers, Highways Inspectors (Streetworks) Compentency Framework

2.2. Why are Competencies and Accountabilities Needed?

- **Clear Expectations**

  Organisations and their staff require clear expectations of each other with respect to the role they are expected to deliver, in addition service stakeholders and customers will also have similar expectations.

  Competencies assist in defining how a person should perform in their role and they:

  - Define clear standards and measures for individual and team performance
  - Allow plans to be developed in accordance with the organisation's objectives
  - Provide the opportunity for regular and specific performance feedback

  Outlining defied responsibilities for an individual's role, will also aid individuals in understanding their route to progression, through the scales of their current post and see how it links with posts above, so that future progression can be mapped.

  Competencies make it clear to the employee what they are expected to do and at what level they are required to operate. This is important as it provides the employee with everything the role entails and the level they are expected to perform at, without which it may be just fortunate that an employee is good at their role.

- **Performance**

  This is important because it identifies how well employees are doing and it provides feedback to the employee on their effectiveness, areas requiring improvement and identifies any support or training and development requirements. Without regular checks on performance there is a risk that the employee may not be operating in the best interest of the organisation or achieving their full potential.

- **Support and Training**

  Whilst for many employees their manager is often the primary source of support, it is much more effective to provide coaching, support and training if there are a set of competencies and accountabilities that define how and to what level the employee should be delivering. As with 'performance', it makes it possible to identify specific outcomes that the role is required to deliver and which may require development. By having a set of defined competencies that

managers (or others involved in the support and development of an employee) can use, this promotes consistency of approach and application which relates to the organisation's defined standards rather than each manager developing their own silo agenda.

To this end, all staff that are on a training programme, or working towards a professional accreditation will be assigned a Mentor, who is not their line manager. The role of the Mentor is to help guide the individual through the routes of development.

- **Career Planning**

Employees may often slot into certain roles because they are good at what they do. Competencies provide an opportunity not only to understand how well they meet the expectations of their current role, but also to look at what ancillary competencies might be needed for development into other roles. Consequently, a 'Development Plan' for that employee could include specific development, training and qualifications to help prepare for the next role.

This is included in the yearly review within Fusion for all staff, and is discussed with managers during one-ones. This will allow staff to see their progression from one grade to the next.

For staff that are on a training programme, or are on a route to professional accreditation, this will link in with the appropriate professional institution process.

- **Retention and Succession Planning**

It is crucial that staff retention and succession plans are in place, particularly if an organisation wants to manage business continuity effectively. Competencies can be used in the same way for retention and succession planning as they are for career planning. Being able to review and develop career plans and understand competency gaps is vital for retention and succession planning in support of the future needs of the organisation.

Succession planning with the Highways and Sustainable Transport (H&ST) team is managed within each of the service areas. It is mainly by way of retaining a range of grades from junior to senior, providing a clear route for junior staff to get to a senior position. This then assists with succession planning.

- **Recruitment**

The benefit of using competencies and accountabilities for recruiting is that they provide detailed and specific criteria for the person being sought, making it more likely that the right

person will be selected for the role. By evaluating all candidates against the same performance and competency criteria, this promotes an objective and consistent approach to staff recruitment.

All job descriptions have defined competencies and accountabilities included, so applicants can see what is required and those in the posts know what is required of them.

2.3.   Disciplines / Roles

Competence should cover all roles across the breadth and remit of the H&ST service area. The components and attributes of competency may vary reflective of the role and in addition to academic and vocational qualifications, delving further into the qualities of the individual in all aspects of the work they are responsible for such as the functional and operational delivery of the role, report writing, administrative and managerial skills and inter-personal attributes. These combined competency attributes will provide a full appraisal and appreciation of competency status of the individual, aligned to the needs of each of the services within H&ST.

For a large organisation, providing specific competency frameworks for every employee will be onerous and it may be that competencies are associated with 'Job Families' whereby the competencies may be shared within the family group. Outlined below is the family roles within the Highways & Sustainable Transport.

Typical 'Job Families'

Director
Head of Service
Principal Officer
Project Manager/Senior Project Manager
Principal Engineer
Senior Engineer/Senior Inspector
Engineer/Inspector
Assistant / Graduate Engineer
Senior Technician

Technician or Technical Officer

2.4.   Levels of Competency

Levels of competency describes a progression ranging from an awareness of the task but not actually doing it or simply doing the task under supervision, to developing the knowledge and skills to work independently to do the job, culminating in managing and developing the capability of others to undertake the task and supervising and advising them.

Managerial roles may require a different set of complex and wide-ranging competencies and evaluations, whilst a simple more functional task may be evaluated on the basis of can or can't do.

So competency is a measure of an individual's proven ability to undertake the task in an effective manner and this should be assessed through either a competency review/test based on defined criteria or a structured performance evaluation through discussion to determine and agree the individual's level of competence and any additional training and development needs.

3. Competency Framework

A competency framework defines the knowledge, skills, and attributes in terms of experiences and behaviours that are needed for staff within a particular service role. Each individual role will have its own set of competencies, personality traits and motivators needed to perform the job effectively. To develop this framework, an in-depth understanding of the roles and the part they play in delivering outcomes is required. Individual 'Job Descriptions' and more specifically the 'Person Specification' should outline the experience, skills, knowledge, and the personal effectiveness competencies required, as well as relevant qualifications.

By collecting and combining competency information, a standardised approach to performance can be created that is clear and accessible to everyone. The framework outlines specifically what people need to do to be effective in their role, and it clearly establishes how their roles relate to organisational goals and success.

3.1.　Developing a Competency Framework

To develop the framework, an in-depth understanding of the roles within the service will be required and this can be achieved by:

- Using a pre-set list of common, standard competencies, and then customise it to the specific needs of the service or the individual.
- Create a general organisational framework and select from this various components as the basis for other frameworks as needed.

Developing a competency framework can take considerable time and effort and to make sure the framework is used as needed, it is important to make it relevant to the service and to those using it and they should take ownership of its content and application.

The following principles are critical when designing a competency framework:

- **Involve those doing the work** –The competency framework should not be developed solely by the Human Resources team who do not always know what each job involves, nor should they be left to the sole discretion of managers. To understand a role fully, it is necessary to speak with the person(s) doing the job, in addition to obtaining a variety of other inputs into what makes someone competent in that job.
- **Communicate** – There is often a nervousness about setting performance and competency issues. Keeping those involved in the development of the framework model, how it will be created, developed and used, and the mutually agreed setting of standards, targets and outputs will assist in its implementation and promote its ownership.
- **Use Relevant Competencies** – Ensure that only relevant competencies are included and applied to all roles covered by the framework. For example, in creating a framework to cover the whole organisation, then financial management would not be included unless every employee had to demonstrate that skill. However, a framework covering the management roles of the organisation would likely need to demonstrate competency for many aspects of financial management.

Before starting to analyse jobs and determining what each role needs for success, it is necessary to apply the following:

- Look at the purpose for creating the framework, how it is planned to be used and how it will impact on those involved in preparing and determining its scope.
- Create a competency framework team to include people from all service areas that will use the framework take ownership of it and be responsible for keeping it up to date.

The development of a competency framework will include many components. For each staff member role within the highways team the range of service disciplines they are involved in will be identified, and against this a desired competency level will be determined reflective of their job description and person specification. Through a process of assessment and review, their competency levels for each aspect of their work will be registered in consideration of their qualifications, knowledge, skills, experience and understanding, and this will be supported by an evidential track record of their achievements and their operational outturns and outcomes. From this any training and development needs may be identified and implemented in a timely manner reflective of essential/priority service delivery needs and subject to budget affordability constraints.

The competence framework process will assist the highways service team in identifying their business continuity arrangements, succession planning needs and staff retention initiatives.

However, H&ST has chosen to make use of existing Frameworks that are already in place, from recognised sources. These may be adapted over time, but in the first instance, are mostly directly aligned.

3.2. Collecting Competency Information

Generally, the better the data collected about a role the more accurate the competency framework will be. A range of techniques can be used to collect information about the individual roles, and the work involved in each one will influence the effectiveness of the framework.

The data collection techniques may involve:

- **Observe** – Watch people while they are performing their roles. This is especially useful for jobs that involve hands-on labour that can be physically observed.

- **Interview** – Talk to every person individually, choose a sample of people to interview, or conduct a group interview. Interview the supervisor of the job that is being assessed. This helps to provide an understanding from a wide variety of people on what they feel and believe is needed for the successful delivery of the role.

- **Survey / Question** – A survey or questionnaire is an efficient way to gather data. Spend time drafting the right questions and consider the issues of reliability and validity.

- **Analyse** – identify and analyse the personal experiences, behaviours, motivators and personality traits of staff used to perform the jobs covered by the framework including:

  - Business plans, strategies, and objectives

  - Organisational principles

  - Job descriptions and person specifications

  - Regulatory or other compliance issues

  - Predictions for the future of the organisation or industry

  - Customer and supplier requirements

Job analysis using a combination of the above data collection techniques will provide the most comprehensive and accurate results.

As information is gathered about each role, record it in separate behavioural statements.

For example, a Highways Inspector role involves:

  - Demonstrate IT competencies and use of a data capture device

  - Compliance, correct and consistent application of the survey inspection manual

  - Understanding and application of the risk-based approach to safety inspections

  - Stringent application of site safety protocols

  - Orderly and diligent in following the prescribed inspection routes

  - Public facing and engaging whilst on site

  - Drafting of statements for third party insurance claims and court hearings

- o Giving reliable evidence in court in defence of the service delivery provisions
- o Production of works orders to the highways contractor
- o Appropriately, trained, qualified and competent in the operational disciplines of safety inspections

3.3. Competency Tests

Within the H&ST service, competency testing is undertaken in different ways, depending on the position. This is undertaken to provide assurance to the individual and group.

See below the process by which these tests are undertaken for technical staff within the service:

<u>Highways Safety Inspectors and Streetworks Inspectors</u>

- The Manager to set a suitable test of competence:- eg, identify a length of road or street works area and record the defects or non-conformities within the limits of the test area and then assess each Highway safety Inspector's or Streetworks Inspector's ability to identify and effectively manage all the non-conformities or defects reflective of a risk-based approach to service delivery
- Depending on the level of the inspector, it is appropriate to set a minimum bar to reach in order to justify competency, or it may be that failure to correctly recognise all the non-conformities or defects and their safety status represents incompetency. The competency test will then be used to identify further training needs to further develop and enhance competency levels of the staff member. This should be recorded in Fusion under the appraisal process.

<u>Project Management Staff</u>

- The assessment of competence for project managers is not a generic assessment or test, but rather based on the individuals experience of similar projects being delivered. This should be undertaken by the Principal Officer in charge of the delivery, or a senior manager.
- The assessor should familiarise themselves with the type of projects being managed. They should evaluate the project managers capacity to identify potential problems, analyse the

project and any associated risks, ensure that the project manager can develop innovative approaches to solve problems to mitigate the risks.

- The assessment should also consider the project managers understanding of any commercial and programme associated issues linked to the project, and should question their ability to manage changes in priorities for these.

- It should also consider the technical aspects required for the project management of given projects. It may not be appropriate to have a project manager who would normally deliver a IT project to deliver a highways project.

Design and delivery based staff(engineers/planners etc)

- The assessment of competence for design and delivery based staff (whether capital or revenue) is less quantitative and more qualitive and based on the need and levels for advice, direction and support leading to a growing level of confidence and independence to achieve the task in hand.

- The level of competence is centred around a self-assessment and follow up discussion to determine the disposition, comprehension, communication and autonomy of the individual. This is done by seniors within the service by way of challenging designs, undertaking reviews.

- Competency is also assessed and demonstrated by exploring the engineer's opinions regarding a defined design scenario reflective of their thoughts on possible design options, materials, longevity, costs, pros/cons and finally coming to a conclusion and decision on the design selected for construction. This will enable the manager to determine the level of skill, knowledge, understanding and autonomy that the designer is exhibiting, in identifying treatment options and a best value design solution.

- Additionally, to assist in the design review process, designers have the ability to access a review panel that is held periodically, which allows the designers or project managers to be challenged by their peers. this in turn aids the overall services confidence in its staff competency.

- Competency on the implementation (delivery on site) of projects is to be monitored by the Principal Officer for the project being delivered. The competency assessment of the individuals will be based on their understanding of the project, its risks, programme, financial

constraints and the technical difficulties involved in its delivery. It is not possible to have a generic assessment that covers all projects, so it should be a holistic approach to experience and capability, with constant monitoring. Principal Officers will review projects and manage their associated delivery team to ensure that the engineers who are managing the delivery have sufficient knowledge to complete the project. Where this is lacking, appropriate training or mentoring should be provided.

3.4.   Grouping Behaviours and Skill Sets into Competencies for Consistency.

It is necessary to align behaviours and skill sets to different groups and competencies to ensure appropriateness to job grading.

There are three separate service areas with the H&ST service, these are listed below;

- Transport Policies and Programmes –
- Engineering
- Network Management

These all require slightly different behaviours and skill sets, although the overall objectives within some of the roles within each may be the same.

Within the service, competencies and requirements are covered in the specific job descriptions. Although the descriptions are not exhaustive, they do give an understanding of the abilities and attributes required for the post. Individual posts are not listed within this document, but for ease are grouped into similar roles.

- The Council also undertake an evaluation of each of the job descriptions to ensure that consistency is achieved across the various staff grades.

4. Implementation

To help secure buy-in from members of staff at all levels of H&ST, it is important to explain how the series of frameworks that are in place and being used, have been developed, how they should be used, updated and the procedures put in place to accommodate changes. The frameworks used are not new and are not just now being imposed on the Service, rather are existing frameworks that are in use, and just been captured in this document.

However to help implement changes the processes and ensure they are used effectively, the following actions have been considered over a number of years.

- **Linking competencies to business objectives, and national guidance** – Make connections between individual competencies and organisational goals and values.

- **Provide mentoring, coaching and training** – Ensure adequate mentoring, coaching and training is available to support the development and training plans that the assessments of individuals may require.

- **Keep it simple** – the frameworks and the adaptations should be as simple as possible in order for them to be used effectively as a tool to achieve good operational management and to secure understanding, ownership and the application of their content.

- **Communicate** – Most importantly, treat the implementation of the competency model as you would for any other change initiative. An open and honest approach to the development and implementation process for the competency approach will provide a better chance of the project achieving its objectives.

Creating and using competency frameworks helps managers make informed decisions about talent recruitment, staff retention, and succession strategies. By identifying the specific behaviours and skills needed for each role it will enable the budgets and plans for training to be considered, promote the proficient delivery of the service, and stimulate the development of its employees who are required to deliver effective and efficient services.

4.1.   Assessing Competency

Assessing an individual employee against a competency framework for the designated role is key to the process and it can be undertaken in several ways, depending on the needs of the department at the time. Whilst it may be appropriate to undertake and assess practical tests of competency in some areas (for example Highways Safety and Streetworks Inspectors, and technical officers). In other areas it may be more effective to evaluate the skills of an individual against the frameworks through self-assessment or a joint discussion between the employee and the manager as there is no one specific element which can be practically tested. The competency requires a more informed discussion on current and past performance, to provide evidential examples of works and services

undertaken and performance outcomes and outputs in order to identify capability and compliance. This is mostly the case for engineers, planners, designers, project managers and managers.

4.2.   Self-Assessment for Training and Development

This requires the staff member to take a reflective and honest look at their level of competency and capabilities for each of the competences required in the framework model for their specified role. In these cases, the staff member identifies a proposed training and development program for presentation and discussion with their manager or mentor. They will jointly review and moderate the responses and identify an effective development and training plan as considered necessary to support the operational and business needs of the service.

H&ST have a defined training programme/process available for graduates and apprentices. Whereas experienced members of staff, will be expected to prepare their own development programme, and record this through the Fusion system. This should be done through the Personal Development Review (PDR) process and one-one discussions, as outlined below.

4.3.   Joint Assessment

A similar process to the above but in this case the assessment is jointly undertaken with the employee and the manager, both evaluating the level of competency for each of the competence attributes required by the employee's role.

Both the above forms of assessment should be undertaken as part of the planned annual PDR from which an agreed training and development plan is derived and recorded in Fusion.

4.4.   Personal Development Review (PDR)

It is important to undertake formal annual reviews to promote effective staff development and to ensure that the competency model is maintained for all resources.

A series of annual review meetings is held between the manager and the employee at the beginning of the financial year, normally around April / May time, with the purpose of:

- Reviewing performance against previous years objectives / targets

- What has worked well and what requires improvement and further development.

- Identifying the forthcoming years objectives / targets

- Assessing the effectiveness of the development and training undertaken as identified in the previous year's training plan or as required by changes in work processes and legislation

- Identifying future development and training plans to maintain competencies

PDR plans are live documents that should be regularly reviewed to ensure that the objectives and targets are on track and also to ensure the identified development and training plans are effective in ensuring competencies and standards are maintained and achieved. These should be reviewed as appropriate, at one-one meetings, with progress formally recorded at half-year reviews in October and November. All records should be recorded on Fusion.

5. Training Programmes

This sections covers an overview of the training and what has been put in place for the individual grouped roles within H&ST(currently only roles linked to HIAMF), what framework is used for the respective competencies and training programmes. Where appropriate, these can be mapped through the different accreditation grades, showing where staff should be in the process, for a given accreditation.

There are four main frameworks/programmes that are used to assist the individual officers obtain accreditation or professional membership of appreciate bodies these are

- UK Roads Liaison Group, Highway Competency Framework, (Note - asset management not yet included within this training section)
- UK Roads Liaison Group, Highway Inspectors Competency Framework,
- The Engineering Council, UK Standard for Professional Engineering Competence and Commitment (UK-SPEC)
- The Institute of Highway Engineers, Highways Inspectors (Streetworks) Compentency Framework

The four will be referenced under the appropriate roles.

Separate to the above, there is also a means for development through the pure project management route. This is covered under section 5.5.

In addition to the dedicated training and Competencies Frameworks, the Council also provide compulsory training for all staff. This is to fulfil the Councils obligations as an employer and will cover health and safety, wellbeing etc.

Alongside the generic compulsory training, there will also be opportunities to undertake formalised training, provided by third parties on behalf of the Council, or other external partners. This is most likely to be in the form of seminars, lunch time sessions or evening lectures.

Mentoring is also provided to all staff, at all grades within the H&ST service. The amount of mentoring provided is linked to the role and staff grade. Formal mentors will ideally not be the line mangers of the individuals, so they can offer impartial advice on development and progress to the mentee.

A series of in-house lunch time sessions is also run, where external parties come in and offer best practice and advise. As part of this, internal staff also offer presentations on knowledge that they have learned.

5.1. Apprentices

For the purpose of this document, Apprentices means Civil Engineering Apprentices Grade 3 to 6.

Apprentices are expected to have had a minimum level of qualifications prior to joining the Council, and then have appropriate level of qualifications before they enrol on a University degree course. This should be at least three A levels at Grades A*-C including Mathematics and Physical Science or their equivalent or will have completed a Level 3 Apprenticeship as a Civil Engineering Technician. Further education at university is expected to be to BSC, BEng level. This will need to be done over a series of years, depending on the course. If this is not achievable, the Council may look to enrol either apprentices or existing staff on Level 3 Civil Engineering Technician (EngTech), with a chosen educational establishment.

Apprentices are expected to work all year round, with attendance at university during term times, as the course requires. Time off will be given from work commitments, to attend university and course fieldwork sessions.

Apprentices will be expected to work with both line managers and Mentors to develop a development action plan, to map out their development within year and until the end of the programme. This should be done at least yearly and reviewed quarterly.

The apprentices will initially start in one team and spend up to one year in this team. Once this year is complete, it is expected that the will be rotated around the various teams within H&ST. This rotation is aimed to help them get a full understanding of the operation of the service, and a well-rounded knowledge of the different specialist skills that it takes to run the service. This should also help them develop their skills and knowledge base, which should in turn help them with the education qualifications.

There will be times when apprentices will need to undertake other training, separate to the university course to maintain the Continued Professional Development (CPD). It is expected that the will also need to make a commitment to learn in their own time.

Apprentices will be required to become a member of the Institution of Civil Engineers (ICE) (they can if they wish also join the Chartered Institution of Highway & Transport (CIHT)) as student members. This enrolment as a student member is free.

Throughout their education time at university, they will be required to complete the Knowledge, Skills and Behaviours (KSB's), and complete the End-point assessment with the university and ICE. This will complete their apprentice with the outcome being a Bachelor of Engineering Degree (BEng).

Alongside their education, the Council will enrol the apprentices on the Incorporated Engineer (IEng) route with the ICE. This is the professional accreditation for incorporate engineers. This will require the apprentices to make use of the Initial Professional Development online tool with the ICE. This is effectively a record of experience and evaluation over the duration of the apprentice. They will be required to submit documentation and examples of experience, whilst also completing competencies and objectives throughout their training. During this time the apprentices will be assigned a ICE Mentor who will meet with them quarterly to sign of objectives, competencies and experience.

For Civil Engineering Technicians on the EngTech route, the above is the same, just with revised Competencies and Objectives. However these apprentices may choose to wavier the EngTech

professional qualification to progress to university and either the IEng or CEng professional Qualification.

If after the apprentice period and achieving both BEng and IEng, Engineers can obtain further education qualification, typically at Masters Level, and can then apply for Chartered Engineered Status.

As part of the programme, apprentices competencies' will be evaluated and guidance will be offered on what additional training may be required, where gaps have been identified.

ICE Documentation

EngTech

https://www.ice.org.uk/download-centre/epa-civil-engineering-technician-apprenticeship-guidance-v1-1

and

https://www.ice.org.uk/media/pw1fmulb/epa-timeline-l3-cet-v11.pdf

IEng

Level 6 Civil Engineer non-integrated degree Apprenticeship EPA guidance | Institution of Civil Engineers (ICE)

and

https://www.ice.org.uk/media/hmydvplg/epa-timeline-l6-cesm-da-v1-0.pdf

5.2.   Highways Safety Inspectors

The highway inspection team will use the UK Roads Liaison Group, Highway Competency Framework. The Competence areas of these are listed below.

- Highways Law - Understands relevant legislation in relation to highways, including the role inspections play in supporting highway authorities provide a safe highway network and defend their work against potential claims.
- Planning and Carrying out Inspections - Able to plan, co-ordinate, carry out and record inspections on the network.

- Risk Assessment/ Management - Able to assess risks on highway networks using risk management principles in line with the Councils Highways Safety Inspection Manual(HSIM).
- Record Keeping - Able to carry out all relevant administrative processes as required by HSIM.
- Asset Management - Understand the core principles of asset management.
- Customer Service - Understand how their role influences this service provision.

The full detail and level of competencies is as outlined in https://ukrlg.ciht.org.uk/media/11779/highway-inspector-competence-framework-final-document-june-2019.pdf

This is aligned to the UK Standard for Professional Engineering and Competence and Commitment'" document (4th edition)Engineering Council, Engineering technician.

Typically, Highways Safety Inspectors will continue their professional development by attending several courses, periodically keeping up to date with current regulations and practices, as highlighted below;

- Highways Safety Inspectors Module
- LANTRA Street Works
- New Roads and Street Work Act

Typically, the above Qualifications equate to an NVQ level 3 or 4.

This CPD will be assessed annually as part of their appraisal process.

Mentoring will generally be provided from senior managers, with internal one-one assessments undertaken, to ensure that individuals are developing as required.

5.3. Planners, Engineers and Technicians

Within this role there are a series of add hoc specialised training courses that need to be maintained for specific roles. Though these are not all statutory requirements, some are. Those who are undertaking the role of Road Safety Engineer, are required to be RoSPA Road Safety Trained(in

accordance with TfL SQA-0170, or Design Manual for Roads and Bridges (Highways England) GG119. Those who are assessing skid resistance are required to be appropriately trained, so attendance at an appropriate training course is essential.

Similar to the apprentices, planners, engineers and technicians, who are aiming to achieve a professional accreditation, will be assisted in the process, and assigned a mentor. The mentor can assist them through the process of professional accreditation.

This accreditation can be achieved through several institutions, ICE, CIHT, Institution of Structural Engineers (IStructE). it will depend on which Institution the graduate feels most appropriate will meet their career development.

Those seeking accreditation will be required to become a member of their chosen institution and have an appropriate mentor assigned. There is a yearly subscription for graduate members; this will need to be covered by individuals themselves.

There are several levels at which planners, engineers and technicians can gain professional accreditation, these are typically

- Engineering Technician EngTech, NVQ Level 3/4
- Incorporate Engineer IEng, NVQ Level 5/6
- Chartered Engineer CEng, NVQ Level 7
- Transport Planning Professional (TPP) NVQ Level 7

There are typically two ways this can be achieved, either under a joint training agreement between the institution and the Council or via an experience appraisal route. The Council does not currently have a training agreement in place with any of the institutions, but it does work with them and assist through each stage.

The experience appraisal route is effectively the process of the institution assessing the competency of the applicant, before they actually get to make their final application to sit their professional

review. It will vary from institution to institution, but typically involves the candidate submitting a series of reports, covering the competencies for the appropriate level. Following a successful stage, they will be invited to sit a professional review.

Below is what is typically required for the different levels of professional accreditation

- A Master's degree is typically required for CEng,

- A BEng is required for TPP(with some further experience) and IEng, and

- Level 3 or 4 vocational qualification EngTech.

The competency's for all are linked to the Engineering Council's "The UK Standard for Professional Engineering and Competence and Commitment'" document (4th edition), as listed below;

- **Competence A:** Knowledge and Understanding

- **Competence B:** Design, development and solving engineering problems

- **Competence C:** Responsibility, management and leadership

- **Competence D:** Communication and interpersonal skills

- **Commitment E:** Professional Commitment

These can be found under the Engineering Council UK-Spec web page https://www.engc.org.uk/standards-guidance/standards/uk-spec/

This route typically takes 3 years plus, to allow candidates to gain the appropriate experience and knowledge to achieve the competencies. Along the way, additional training may be required to assist. This will be classed as Continued Professional Development (CPD), and a log must be maintained through the candidate's career.

5.4.   Network Operations Officers

Very similar to Highways Safety Inspectors, Network Operations Officers (formally known as Street Works Inspectors will also undertake training on a periodic basis to ensure they keep up to date, with changes to Regulations and Legislation, Specifications and guidance. This is typically as below;

- Highways Safety Inspectors Module

- LANTRA Street Works

- New Roads and Street Work Act

- CLOCS

Typically, the above Qualifications equate to an NVQ level 3 or 4.

Although similar to the Highways Safety Inspectors, Network Operations Officers will concentrate on developments and changes in the industry that effect utility and third party works on the highway. Legislation around this is constantly changing, so a constant update on accreditation for the associated qualifications should be maintained.

The main guidance provided for Network Operations Officers is the Statutory Code of Practice for the Co-ordination of Street Works and Works for Roads Purposes
The Statutory Code of Practice for Street Works Inspections, The Statutory Code of Practice Specification for the Reinstatement of Openings in Highways, and the Statutory Code of Practice for the Safety at Street Works and Road Works

Professional registration can be achieved through The Institute of Highway Engineers, with inspector's achieving the competency outlined in the Institute of Highway Engineers, Highways Inspectors (Streetworks) Competency Framework.

Mentoring will generally be provided from senior managers, with internal one-one assessments undertaken, to ensure that individuals are developing as required.

5.5.   Project Managers

Typically, Project Managers will have come through one of the other routes or roles to the position of Project Manager, which gives them the experience, knowledge and capabilities to undertake the role.

General training on finance and management is available through the Council. There are also advanced courses available that can assist the Project Management Route. Training will be provided for individuals who require additional support in the form of ad hoc courses or through seminars.

Assessments will be undertaken on project managers' competency by the wider management team, with financial reviews, technical reviews and risk reviews undertaken on the projects that the project manager is responsible for. These reviews will flag the need for any dedicated training for the development of the project manager.

Professional academic qualifications are available, but these are geared towards general project management principals and not focused on highways projects. For those seeking the project management route, a decision must be made to what course best fits the needs of the individual and their role. The Association for Project Management hold several courses that are equivalent to NVQ level 4-6. These can potentially be applied to, from funding from central government, via an apprenticeship programme.

Project managers, can also make use of the routes to incorporate engineer and chartered engineer as they see fit. The ICE have an affiliation with the Association for Project Management, that both accreditations are mutually recognised. So if CEng status is achieved through ICE, the holder can also gain the AMP accreditation.

5.6. Mentoring

Mentoring is available to all staff, so for those who don't wish to gain accreditation, they can still be assigned a mentor to assist with their continued professional development. This may be via the line manager or a separately assigned mentor.

Informal mentoring will typically take place with all new starters, assisting the new team member to settle into the Highways and Sustainable Transport Team. This will involve inductions and introductions to the Councils priorities and heart values and the wider team. This typically takes place over a period of weeks, with some online training content provided.

Other forms of informal mentoring will take place, as individuals require assistance with tasks to be undertaken, to help with their normal roles. This is not necessarily linked to qualification or any national accreditation, but will aid CPD. Another member of the team, or a line manager will typically deliver this. There is no requirement for this informal mentoring to be documented, but it is good practice to record it within staff one to ones.

Formal mentoring is generally linked to a qualification or accreditation route. This is typically provided to Apprentices, Graduate Planners/Engineers and Technicians. Mentors will be assigned to individual mentees, to assist in their development and also to help them stay on track with their chosen route. Mentors are expected to make time to meet with their appointed mentee on a monthly or quarterly basis. They should review the route programme, training, tasks set and general wellbeing of the mentee. The mentee is expected to work with the mentor and agree deadlines and targets. A development action plan should outline training requirements for the forthcoming year, and be reviewed on a quarterly basis. Depending on the route chosen, a delegated mentor may be appointed for the more wellbeing mentoring.

The Mentoring supported within the department is currently ICE and CIHT.

Summary

The implementation of this competency strategy is instrumental in promoting staff development and in supporting H&ST business proficiency and continuity needs.

It is evident that the process of defining and reviewing staff competency needs and associated competency attributes aligned to job roles, is vital in the ongoing development of staff to achieve their full potential and in support of the most effective delivery of the service. By setting up a competency framework model for each role, the capabilities of staff members can be determined and monitored in order to manage the skills, abilities, training and development needs of staff, which in turn supports the objectives and business continuity needs of the service.

It is clear from the above that academic and vocational qualifications are not necessarily a proxy for competency and these very important credentials should be combined with other inter-personal competency attributes, in order to evaluate the full scope of staff potential and capabilities.

The process will identify those staff members who demonstrate adequate competency skills reflective of their capabilities, which are sufficient to deliver the service to an acceptable level of performance. It will also help identify those who demonstrate greater potential and promise, who with further training and development, may in the future be considered for promotion to more demanding roles and responsibilities, in support of staff retention and succession planning initiatives.