

European project for the Use of Standards of Competence
in CPD for Construction Industry Practitioners

EUSCCIP

A Framework for CPD Systems for Practitioners in the Construction Industry

November 1997

with the financial support of the Commission of the European Communities under the LEONARDO DA VINCI Programme
Contractor: CISC, The Building Centre, 26 Store Street, London WC1E 7BT, UK.
Partners: CIC (UK), CIF (IRL), CFCI (FIN), EngC (UK), EVITech (FIN), FÁS (IRL),
IEFP (P), IEI (IRL), NBE (FIN), OEng (P), QCA (UK), RAL (FIN), SQA (UK).

How to Use This Document

This document uses different fonts and icons to present different types of information. Text in a bold plain font (like this) presents the *Framework* itself. The *Framework* should be read as a series of *benchmarks of good practice*.

The other information is in a classical font (like this) and an appropriate icon shows who it is aimed at. Numerous explanations, real illustrations and examples are provided:



aimed at all readers, these are general notes on implementing the *Framework*.



a commentary written for **ORGANISATIONS**, explaining the practical implementation of the *Framework* and the suggested 'steps' which organisations can take.



a commentary for **INDIVIDUAL PRACTITIONERS** explaining the implementation of the *Framework* and suggesting 'steps' which individuals can take.

examples (boxed within double lines) show how the *Framework's* components have been implemented in different countries. Their format is:

Examples

Each country will want to make this *Framework* as easy for its own *practitioners* to use as possible, for example by:

- translating it into their own language and context.
- giving examples relevant to their national situation.

Typical examples are given throughout the document, and countries are encouraged to replace them with their own examples, and to add others.

Some words (shown like *this*) are defined in a glossary in Appendix F.

Use of Implementation Steps

In addition to describing the various components of the *Framework*, further guidance is given in the form of 'Implementation Steps', which suggest how **ORGANISATIONS** ('organisation steps' 1 to 11) and **INDIVIDUAL PRACTITIONERS** ('individual's steps' 1 to 10) can develop and implement the *Framework*. Because implementation is evolutionary, many of the steps offer several alternatives - each progressively more structured, each appropriate to a different situation, but all being acceptable. They are shown in boxes like *this*:

'Individual's Step' 1 (What definition of Continuing Professional Development will you use?) appears on page 6.

Although steps are set out in a sequence, in practice *individuals* and *organisations* will start at whatever point on the cycle suits their own situation, even retracing their steps to review, modify past decisions and implement their CPD in an improved way. In this way CPD is iterative, a cycle of continuing development and improvement, and there is no end point.

CONTENTS

Figure 1 Diagram: Framework for CPD systems

1. INTRODUCING THE NEW FRAMEWORK	
1.1 Introduction	2
1.2 The aims of the Framework	2
2. CPD (CONTINUING PROFESSIONAL DEVELOPMENT)	
2.1 What is CPD?	4
2.2 Why CPD?	6
2.3 Why use standards of competence for CPD?	8
2.4 What is a CPD system?	10
2.5 Evolution of CPD systems	10
2.6 Who is responsible and who pays?	12
3. THE FRAMEWORK	
3.1 Understanding the Framework	14
3.2 Sources of support and guidance	14
3.3 Context of the Framework	14
4. CORE PROCESSES	
4.1 Review (Analysis and Appraisal)	16
4.2 Planning	18
4.3 Development activities	20
4.4 Assessing achievements	22
5. SUPPORTING FUNCTIONS	
5.1 Providing support and guidance to individuals	24
5.2 Standards of competence	26
5.3 Quality	30
APPENDICES	
A EUSCCCIP partners	
B Model Proformas	
C Example of Occupational Standard of Competence	
D Interested parties in the CPD System	
E International organisations promoting CPD for construction industry practitioners	
F Glossary	

1 INTRODUCING THE NEW FRAMEWORK

1.1 Introduction

As the title implies, this document provides a framework for good practice from which organisations and individuals working in the construction industries of European countries, can develop their own CPD policies and practices.

The framework is intended to provide the benchmark for CPD and includes all the components needed for a good CPD system. A CPD system which does not include all the components of the Framework cannot be considered to be complete.

The Framework has been prepared by a four nation team (see Appendix A) who represent the responsible bodies in the UK, Finland, Ireland and Portugal. The work has been carried out under EUSCCCIP (European project for the Use of Standards of Competence in CPD - continuing professional development - for Construction Industry Practitioners) and funded under the Leonardo da Vinci programme of the European Commission.

1.2 The Aims Of The Framework

- To help individual practitioners with their CPD.
- To provide a flexible and comprehensive outline specification based upon the contents of best practice CPD systems which can be applied by individuals, employers, organisations and professional institutions in the construction industries of EU countries .
- To provide a check-list for the component parts of a successful CPD system.
- To provide a framework which will encourage designers of CPD systems to move away from those based on inputs (eg time spent) towards outcomes (eg based on standards of competence in employment).
- To provide sufficient flexibility to accommodate the different cultures and current practices in each EU country and its organisations.



The Benefits

By implementing CPD in accordance with this *Framework*, *organisations* and *individuals* will adopt *best practice*, making their CPD more efficient and more effective. The *competences* gained through CPD enable individuals to cope with change, comply with legislation and perform better.

As more *individuals* and more *organisations* adopt the *Framework*, there are advantages when different European countries use compatible CPD systems based on a common *framework*:

- encouraging the use of *best practice*.
- promoting *flexibility*, *transferability* and enhanced skills.
- encouraging implementation in other countries and other sectors.
- promoting collaboration and mutual understanding between different parts of the Construction Industry.
- promoting a common, transparent, international language and currency of *competences*.
- encouraging improved provision of CPD opportunities.

Those already involved in CPD can use the *Framework* as a ‘*benchmark*’ against which to review or plan the development of their own CPD system.

Those without a CPD system will find the *Framework* helpful in managing their CPD.

Individuals who are not members of a professional institution or whose employers do not operate a CPD system, will be able to use the *Framework* to get more out of their own CPD.

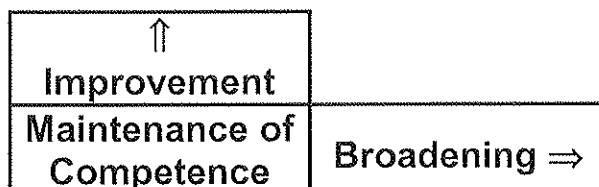
Motivation for Doing CPD in the UK Construction Industry

- most CPD is done without any intention of gaining credits towards a qualification.
- *individuals* are motivated by an interest in their occupation, a desire to keep up-to-date and employable, and to promote their own careers.
- most *individuals* record their CPD principally to meet the rules of their professional institutions and, while doing so, have in mind their own particular needs and ambitions.

2. CPD (Continuing Professional Development)

2.1 What is CPD?

Continuing Professional Development is commonly known as CPD. It follows initial vocational education and training, leading to a vocational qualification, and they should all be integrated and consistent. The good habits and procedures adopted for initial education and training should be compatible with those for CPD, so that there is a 'seamless' transition on gaining a qualification. CPD includes both the maintenance and improvement of existing *competences* as well as the development of new *competences* (see diagram below); it implies the individual's commitment to professional excellence.



CPD is not just about courses or qualifications. CPD includes a wide variety of activities which lead to learning and development. These include open learning, private study, work experience and many more.

CPD is one aspect of life-long learning, that aspect which relates to a *practitioner's* work and career.

Because of the variety of choice, a universal approach is not appropriate. With such diversity of cultures, aims, needs and languages, it is inevitable that countries and *organisations* will emerge with considerable variations in their perception of CPD, extending even to the definition of CPD itself. The *Framework* has been designed to offer sufficient *flexibility* to accommodate this rich diversity.



For Organisations

Organisation Step 1: CPD Definition

What definition of Continuing Professional Development will you use?



For Individuals

Individual's Step 1: CPD Definition

What definition of Continuing Professional Development will you use?



For Organisations

CPD is about the training and development of all the *organisation's* staff. This does not need highly formal and inflexible systems. It can happen in other ways. It can result from shared experiences between members of the staff or the development of an individual's leadership skills following a well-considered delegation of authority and responsibility. It might even result from undertaking a challenging new task (such as planning and leading the organisation's CPD system!).

Development is coping with change, preferably before it happens. A successful CPD system is a reflection of the enthusiasm of those operating, participating in and supporting it.

“Even the most efficient conventionally delivered training, whether in the form of apprenticeships or off-the-job vocational training, can only produce a tiny percentage of the learning and development that is required in an organisation.” (Michael Pearn)

Definition of CPD in the UK Construction Industry

After much experience of promoting and supporting CPD, the construction industry has emerged with a definition that has, over more than a decade of practice, won the support of the majority of professional institutions. This is:

“The systematic maintenance, improvement and broadening of knowledge and skill and the development of personal qualities necessary for the execution of professional and technical duties throughout the practitioner's working life.”

This suggests that, for a *practitioner* to work properly, the systematic acquisition of knowledge, skills and personal qualities is essential. It further suggests that, once acquired, the same knowledge, skills and personal qualities must be methodically kept up-to-date to maintain them at an adequate level. They must then be developed and broadened.

2.2 Why CPD?

The Construction Industry is constantly evolving. Rapid developments in technology, new and shifting markets, the economic situation, a more mobile international work-force, preparedness for promotion, or a change of job - all place greater emphasis on the continuing need for the *individual* to be well informed and professionally competent.

Both employers and clients need competent practitioners. Government and professional institutions have a responsibility to ensure public and environmental safety. All require the industry to provide better standards, faster and at lower costs. This is particularly true of the construction industry which creates most of a nation's fixed infrastructure and investment. Well developed and professionally competent workers will enhance the public image of the construction industry.

Individual's Step 2: Specify the Aims and Objectives

Individuals should write down the overall aim of their CPD system, together with specific targets- tangible objectives - by which they can measure success.



Motivation

There are many driving forces, among them added-value, business performance and individual career development. The ultimate goal has to be skilful people in efficient organisations. The most potent and primitive of all motives are employment and survival. Change is pervasive. Most of those still in employment are survivors with skills that are a response to a changing environment and which maintain and ensure employability, allowing entry into the new professions that have emerged. Motivation is, and will increasingly be, market-driven.



Motivation For Organisations

Employers, (professional) Institutions, clients and Governments have different motives in providing and promoting CPD. Common to all is the advantage that stems from having efficient and skilful people in efficient firms and organisations. Clients require to know that the company and the professionals carrying out their work have the necessary verifiable competences, institutions want to assist their members in providing those competences and the Government hopes to profit from the competitive and efficient industries that boost its economy.

“The rate at which an organisation learns may become the only sustainable source of competitive advantage.”(Ray Stata)

“Business, we know, is so complex and difficult, the survival of firms so hazardous in an environment increasingly unpredictable, competitive and fraught with danger, that their continued existence depends on the day-to-day mobilisation of every ounce of intelligence. The core of management is precisely this art of mobilising and putting together the intellectual resources of all employees in the service of the firm.” (Matsushita)



Motivation For Individuals

But the benefits are not confined to the organisation. The individual is motivated in many ways, among them:

- preparation for new jobs,
- intellectual challenge,
- need for up-dating,
- an anticipated need to provide evidence of professional competence,
- compliance with employer’s and professional institutions’ requirements.
- promotion or moving sideways,
- awareness of shortcomings,
- fear of litigation,

The Finnish Competence-based Vocational Qualification System

Finland is developing competence-based vocational qualifications which do not depend on how the practitioner acquired the required skills and knowledge, whether at work, in training or in leisure pursuits. The system leads to recognised vocational qualifications, particularly catering for vocational adult education and training. The system can be flexible and tailored to individual circumstances, not tied to participation in specific training.

The qualifications are modular, so that the trainee can choose which modules to submit for assessment. The system serves as a network of support for life-long learning, offering educational support for adults at various stages of their lives.

The ‘social partners’ (representatives of government, employers and employees) participate actively in the assessment system ensuring that it meets the needs of trade and industry.

2.3 Why Use Standards Of Competence for CPD?

To carry out their CPD effectively, *individuals* need to have a clear and objective reference against which to build their development. Any system for CPD, whether led by employers, professional institutions, industry or government, will be enhanced by using an agreed *framework of standards of competence*.

There are clear economies in adopting standards already developed by others. Such Standards should be based on what actually happens in Industry and should take into account industry's real complexity, including coping with the unexpected, managing the task and managing oneself.

Once developed, *standards of competence* have a variety of potential uses, including:

- opportunities for structuring CPD
- identification and targeting of development needs
- job design, performance appraisal and work planning
- a basis for assessment and certification of *competences*
- allowing *outcomes* rather than inputs to be used, so that changes in *competence profiles* can be measured.

Professional Bodies in the UK Construction Industry

Professional bodies play a major, though varied, role in encouraging their members to participate in CPD. They can do this by use of either the 'carrot' or the 'stick'; that is by incentive or penalty.

Some professional institutions prefer to persuade their members to undertake CPD voluntarily, offering general guidelines to intending participants. Other professional institutions make CPD ***obligatory***, laying down requirements such as minimum durations and acceptable standards. Some expect their members - when called upon - to provide evidence of their meaningful involvement in CPD over a number of years.

The requirements of professional institutions in the UK are usually set out in their rules of professional conduct. These can include the requirement to help others with their CPD, e.g. in the role of line manager, employer or ***mentor***.

2.4 What is a CPD System?

A CPD system consists of a structure and procedures to help an *individual* undertake CPD efficiently, and in a regular way. Depending on legislation and the wishes of the *organisation*, different components can be *voluntary*, *obligatory* or *mandatory*.

A CPD system allows *individuals* to:

- review and explore their professional and personal careers/*competences*
- discover and set down their individual strengths and weaknesses
- make and use a *development plan*
- record their intentions and provide verification that they have conformed to their plans and achieved their targets

A system can be devised to suit the needs of an *individual*. Alternatively it can be designed by an *organisation* (eg employer or professional institution) to satisfy the requirements of a number of *practitioners*. All systems can vary in detail while working within the *Framework's* guidelines.

2.5 Evolution of CPD Systems

CPD systems evolve in response to changing demand and new circumstances.

Economies of scale promote the sharing of CPD systems and their components such as standards, *proformas* and quality systems.

Individuals and their employers have the opportunity to share in ever larger groupings such as professional institutions and industry-wide as well as governmental, bodies. Larger grouping leads to greater standardisation by using common formats.

Increasing levels of sharing provide an evolutionary path for a CPD system. A more broadly shared system has the advantage of progressively wider recognition of achievement and *competence*.

2.6 Who is Responsible and Who Pays?

CPD is essentially about *individuals*, their development needs and what they are doing to achieve them.

Individuals are ultimately responsible for managing their own CPD, although most people have obligations to employers, professional institutions, Government and society. Employers, in return, can provide support in one or more of the following ways:-

- developing company procedures which support CPD
- providing development opportunities (particularly those that can be experienced in-house)
- assisting with resources and expertise
- giving positive encouragement and recognition

In a formal system the obligations of all the parties need to be clearly understood and recorded to avoid later disagreement. The *individual* and the employer both benefit from improved *competence* and so both contribute to the cost of CPD whether in cash or in kind (by donating their time or services). The balance of contributions depends on: where the benefit is taken, the ability to pay, and the *organisation's* policy.

Additional interested parties who provide support and receive benefits are shown in appendix D.



Organisation Step 2: Specify the Aims and Objectives

Organisations determine their corporate commitment to CPD and agree to the adoption of a CPD system based on this *Framework*. The aims of the CPD system are agreed, together with certain *SMART* objectives.

3 THE FRAMEWORK

3.1 Understanding the Framework

The *Framework* is illustrated by the pull-out diagram “Framework for CPD Systems” found as Figure 1. The diagram illustrates the relationship of all the components of a CPD system:

- The four essential ‘Processes’ - ‘Review’, ‘Planning’, ‘Development Activities’ and ‘Assessing Achievement’ - which an *individual*, undertaking CPD, goes through. Each process is part of a continuous cycle, inter-relates with the others and has outputs which feed into the next process
- Each of the processes results in a written ‘Output’. These are ‘Profiles’, ‘Plans’, ‘Records’ and ‘Evidence’ - which record *individuals’* intentions and demonstrate their achievements. They also provide evidence of carrying out the processes and can be used to monitor and improve quality
- The three ‘Supporting Functions’ - ‘Support and Guidance’, ‘Standards of Competence’ and ‘Quality’ -which underpin and facilitate the processes.

The *Framework* is a development cycle. Those undertaking it find themselves more competent each time they traverse the circle; as well as becoming more effective in developing themselves and more adept at managing their own CPD. There is no ‘correct’ place from which to begin the cycle, although for simplicity the *Framework* is presented with the ‘Review’ process as its beginning.

Section 4 gives details of the processes and outputs; while Section 5 describes the supporting functions.

3.2 Sources of Support and Guidance

Support and guidance can save much time and avoid wasted effort when setting up a new CPD system or up-grading an existing system This *Framework* is intended to provide such guidance, and the organisations which participated in its preparation can provide further information and advice.

The first source of support is in-country. There may be legal, or other requirements to comply with (eg relating to health and safety, protecting the environment, licence to practise). It is important to develop a system which is in harmony with other developments in country, to encourage a national consensus of *good practice* to emerge. This will allow training providers, employers, professional and national bodies to collaborate more easily to provide CPD opportunities to *practitioners*. It will also promote a more flexible labour market.

3.3 Context of the Framework

Appendix D illustrates the principal interested parties and their involvement in each component of the *framework*. Other interested parties include: industry-wide bodies, Government bodies, clients and the general public. The actual parties who become involved depend on the differing circumstances, such as current practice in each country and organisation.



Organisation Step 3: Seeking Support/Guidance

3a) Contact national bodies with an interest in promoting CPD.

or

3b) Do the same as 3a), but also contact organisations in other countries (see Appendices A, and E) or others with whom you have contact or which have a good reputation.



Individual's Step I3: Identifying Support

Identify your sources of support and guidance. Contact them and finalise arrangements.



In an international industry like construction, there are great benefits if each country's emerging consensus for CPD can be in harmony with others in the European labour market. Certain international bodies take an interest in promoting CPD, and their contact addresses are listed in Appendix E.

National and regional bodies which are likely to have an interest in helping you with CPD are: Regulatory bodies; trades unions, employer federations, chambers of commerce and other industry bodies; craft and professional institutions; Government bodies for employment, training, qualifications, etc; universities, colleges and other training providers; insurers, client and procurement associations.

4 CORE PROCESSES

4.1 Review - Analysis and Appraisal

Individuals review their personal and professional experiences in a structured way. This appraisal enables them to identify their interests and competences. Analysis of future needs takes account of current, future, job and career requirements.

The appraisal results in a profile of the individuals' personal and professional competences. The analysis identifies the priority areas for their CPD development which is recorded as the profile of needs.



Individual's Step 4: Review (analysis/appraisal)

4a), Use guidance materials (from your institution, employer etc, possibly using Personal Development Manager software) and, in a structured way, review your past experiences and performances. This will enable you to identify what competences you already have and what you need.

or

4b) Do the same as 4a) but this time do it in dialogue with a manager, a mentor, or someone else with experience who can ask the right questions. This could be part of your organisation's performance appraisal system.

or

4c) Do the same as 4b) but with a development specialist - someone who can advise you on the most appropriate ways to achieve your development aims.

Individual's Step 5: Record Profiles of Competences and Needs

5a) Having completed your review write down and keep (for future review) your profile of competences and the profile of needs (competences which you want to achieve for your current job, for your anticipated jobs, for your personal development and satisfaction). Use a CPD proforma for setting out your competence profile, eg from Appendix B, your employer or professional institution.

or

5b) Do the same as 5a) but using the specifications of competence prepared by your employer, professional or industry body, or the national system.

The Tripartite Principle in Finland

The development of the competence-based qualifications and the quality assurance of the assessment are based on the cooperation of trade, industry and educational institutions. The tripartite 'examination boards' which organise the assessment, are made up of 6 to 9 representatives of employer and employee organisations, and teachers.

The examination boards are expert bodies and define the requirements and content of the skill tests, and analyse the occupational needs for knowledge, skills and experience. They also issue the certificates of competence.

Engineering Professional Institutions' Responsibility for CPD

The UK engineering professions have a common 13 point framework which lists the responsibilities of professional engineering institutions for their members' CPD.

Engineering Professional Institutions' Requirements for CPD

The UK Engineering Council specifies the education, training and professional development requirements for registered engineers through a policy document 'SARTOR' (Standards and Routes to Registration). The 1997 edition highlights the obligation on engineers to maintain and develop their professional competence. At registration all engineers will be required to provide evidence of CPD, in particular through compliance with the CPD code; this focuses on individual engineers recording and planning their CPD to meet employment and career needs.

4.2 Planning

With advice from their *organisations* or a *mentor* (when available), *individuals* identify the most appropriate learning and development activities to meet their profiles of need taking into account the opportunities available as well as any preferences and constraints. They set targets which are of high priority, practical, achievable and challenging.

The profile is recorded as the personal *development plan* which specifies objectives, responsibilities, resource requirements, time-scale and indicators of successful achievement.



Organisation Step 4: Informing Employees

Provide information to employees on availability, cost, convenience, suitability of both in-house and external development opportunities/courses.



Individual's Step 6: Planning

6a) Develop an outline plan stating priorities, target dates and appropriate development activities.

or

6b) Do the same as 6a) and then agree the plan with interested people such as employer, *mentor*, specialist in development, professional institution and someone with the relevant experience.

Individual's Step 7: Development Plan

7a). Commit the outline plan to writing

or

7b). Do the same as 7a) then develop the outline plan to a structured, detailed plan with targets, agreed resources, agreed support, agreed controls and responsibilities.

4.3 Development Activities

This particular component - the implementation of a personal *development plan* - has already been more fully documented by others. This section does not attempt to be comprehensive.

To meet their development needs and achieve their targets, *individuals* choose from the wide range of activities available to them. Activities may be formal and structured, e.g. courses, distance learning, conferences, presentations and research. They may however be informal and less structured e.g. work experience projects and personal studies. Some will be a combination of both.

Although most activities will be planned, *individuals* are encouraged to recognise and take advantage of opportunities which arise from day-to-day work experiences, unexpected challenges and professional contacts.

Successful development usually requires that learning activities are matched by practical applications.

An important outcome of development activities is the detailed record, kept by the individual, of the activities undertaken. The record shows intended objectives, what activities have actually occurred and with what consequences. Verification of attendance and achievement is recorded where available.

The development process is given adequate time to include personal reflection. This is not just a reflection on the development activity but on becoming a better learner.



Individual's Step 8: Development Activity

8a) Reflect on your performance during development activities. Are you using only the limited range of training providers and training methods already known and experienced?

or

8b) With more reflection extend the range of development activities and methods which could be used such as on-the-job, distance and open learning, and so on.

or

8c) As for 8b), but also reflect on which activities you have learnt most from, and review your *profiles of competence* and needs, to include those you need to become a better learner.

Review your planning to use development activities which work best for you.



A CPD Record Book

A model CPD record book can be based on the proformas in Appendix B and might attempt to provide a common format for all construction practitioners, drawing on the best practice of the wide variety of existing record books.

A CPD Record Book is used to store information collected during the individual's progress through the processes of the Framework. This includes written records of:

Reviews: personal reflections, performance appraisals, psychometric test results, analysis, profiles of competences and needs.

Planning: information collected while developing the plan, priorities, targets, dates, budget and suitable development activities.

Development Activities: what actually happened, where, when, the result, and with what consequences (eg the identification of new development needs, or the revision of the personal development plan in other ways).

Assessment of Achievements: including recording and verifying them.

The UK National Record of Achievement

The UK Government has introduced the National Record of Achievement (NRA) or ProFile, designed and distributed by the Qualifications and Curriculum Authority (QCA), which is intended to encourage life-long learning. It issued to all those at school and is available to anyone else. UK organisations' record books are therefore increasingly designed to complement the NRA.

CPD Record Books in the UK Construction Industry

CPD Record Books, with a variety of titles, have been introduced in the UK by many organisations. Their main purpose in standardising CPD record-keeping is to help the practitioner and to facilitate monitoring. Practitioners will often have several record books: from the employer and one or more professional institutions.

The form and content of the record books have evolved to reflect changes in CPD requirements and regulations. An individual's record book usually includes a copy of the organisation's CPD rules and guidance, space for recording development targets together with their eventual performance. Some record books allow individuals to record their employment history (curriculum vitae) and formal qualifications.

4.4 Assessing Achievements

To gain full benefit from their development activities, individuals need to ensure that the results are assessed in some way. This is done against their development plan and measured in terms of new and improved levels of competence.

Individuals provide evidence of their achievements and the development activities which lead to them. A constructive and thoughtful record of assessed achievement provides an excellent opportunity for review by employers, organisations and professional bodies. It is also useful in employment and career development.



Individual's Step 9: Assessing Achievement

9a) After self-assessment, record your achievement against your Development plan and enter it in your Development Record; make them available for review by others.

or

9b) Same as 9a) but express your development achievements using standards of competence. Arrange external assessment and verification where available.

Individual's Step 10: Moving On

Where applicable, obtain a nationally recognised qualification.

Use the assessment and results as the entry point into a new CPD learning cycle.

The Finnish Record Book for the Construction Industry

Finland has developed a record book for construction industry practitioners. It records the practitioner's significant work experience, certificates and other formal training (recognised by employers, employees and education – the tripartite principle). The record book is physically very similar to a passport, and is printed by the same organisation (Setec Oy) as prints passports; which is responsible for entering and validating entries in the record book, and which also compiles statistics from the record books.

5. SUPPORTING FUNCTIONS

The Supporting Functions ensure that the CPD system is integrated and delivers planned *outcomes* to required standards. The Supporting Functions support the four development processes, outlined in section 4.

There are three key support functions:

- Sources of support and guidance for individuals
- *Standards of competence*
- Quality

Without the support of employers, institutions and other partners, individuals can find it difficult to work within the *Framework* or carry out its core processes effectively.

5.1 Providing Support and Guidance to Individuals

An *organisation* provides support and guidance for *individual practitioners* (its members or employees) who undertake CPD. Support and guidance consists of:

1. Identifying the individuals' needs for support.
2. Identifying existing sources for each component of the CPD cycle.
3. Relating these to *standards of competence* and quality systems.
4. Setting up the support functions.
5. Enabling individuals to gain access to appropriate sources of support and guidance.
6. Monitoring use of support and guidance, and reviewing progress.
7. Implementing improvements to the CPD systems.

For Organisations



Organisation Step 5: Identify Needs

Identify needs for support and guidance

Organisation Step 6: Establish CPD System

Publicly nominate staff to hold CPD responsibilities and give them resources and authority.
Set up appropriate support systems.

Organisation Step 7: Manage System

Manage CPD system to generate maximum benefits.

Organisation Step 8: Improve

Produce periodic management reports and review progress.



Methods for identifying development needs:

- Informally take note of which competences people lack
- Questionnaires
- Interviews with experts or a representative sample of individual practitioners
- Hold workshop on CPD
- Discussion in organisation's CPD committee or similar forum
- Invite suggestions from elsewhere from within related organisations (eg regional branches, other companies in the same group)
- Explore what is done by others (eg suppliers, clients, competitors)

Typical support systems: appointment of a CPD Manager, CPD committee (for managing the system, and for promoting local involvement), proformas/ record book/'professional development manager' software, resource centre, explanatory leaflets, telephone help-line, regional CPD officers, mentoring, newsletter, website, conference, local meetings, lists of courses/sources of information/ funding, build into existing management systems (eg QA, annual report, performance appraisal), grants/tax relief/allowances/budgets, etc.

Identify priority needs and alternative levels/costs of provision. Feed back results to decision-makers and employees.

Decide on appropriate 'house-style', logo, etc.

Publicise provision, organise funding to ensure sustainability, generate revenues, recognise success, make agreements to share facilities.

Keep records of usage and queries to identify changing patterns of demand. Carry out periodic surveys.

5.2 Standards Of Competence

The *organisation* and individual select and agree a suitable set of *standards of competence*. The standards should express the main *competences* which the *individual practitioners* use, in an appropriate level of detail and in language which they understand. The standards should be shared and tested with others where possible. There is benefit in adopting widely shared *standards of competence*.

Periodically review the standards to ensure that they:

- are still the most appropriate,
- remain up-to-date and reflect current *best practice*, as their environment changes,
- are evolving towards more widely shared standards.



Organisation Step 9: Select *Standards of Competence*

Define the principal job roles in terms of key functions, activities and outputs. Review existing vocational qualifications; do they specify *competences*. Identify any other specifications of *competences*. Choose the source(s); select only the relevant competences, modify them only if necessary to suit your situation. Test them on *practitioners*.

Organisation Step 10: Maintain the Standards

Establish responsibility for promotion and maintenance of the standards. Specify a periodic review mechanism. Provide adequate resources for sustainability.



Standards of competence:

- specify individual competence in terms of successful performance in the work-place.
- are benchmarks of good practice, which can be used to compare and assess individual performance.
- need to include: criteria for adequate performance, the range of circumstances covered, the required underpinning knowledge and understanding, and guidance on how the practitioner can show evidence of competence.
- are best defined in terms of outputs and outcomes.
- are not about tasks and detail, nor about the means of achieving competence (training and development activities).
- need to anticipate changing industry needs and improving standards of performance.

Standards of competence can be shared at various levels:

1. unique to an individual (eg specified in a unique personal job description).
2. developed for an employer (used in performance appraisals, training schemes, pay, promotion, database of skills, work allocation).
3. developed for a whole profession or sector.
4. National standards shared across all of industry.

Moving towards more widely shared standards of competence is beneficial because:

- it shares the investment in their development and maintenance,
- it facilitates communication between specialisations,
- it facilitates a flexible labour-force (eg multiskilling and transferability)
- it provides economies of scale.

Job roles are reflected in job titles, job descriptions, differential pay rates.

As well as in vocational qualifications, Competences may be specified by: professional, industrial and trade bodies (eg in standards for training and membership), other bodies similar to your own (eg competitors), training organisations, sources of funding, legislation, specialist consultancies, overseas organisations.

In the last resort you can develop your own, but this is an expensive specialist task and since they are not shared with others, there are no economies of scale. This is only likely to be practical for the largest organisations.

The interested parties formalise the responsibilities in the form of: job descriptions (for CPD Managers/ Officers), terms of reference/aims and objectives/budgets (for committees and departments), codes of conduct and rules (for employees and members).

Production Diplomas in Finland

Finland has designed and implemented a competence-based Production Qualification I for the occupation of Building Site Manager. At the end of the 1980s Building Site Manager degrees were introduced by a few of the major contractors. As recession set in at the beginning of the 1990s and companies cut costs, the need arose for a common core qualification for a Building Site Manager and a degree level examination (Production Qualification I, at level 4).

The pilot project started April 1995 funded by the Confederation of Finnish Construction Industries (CFCI) and the Federation of Private Sector Construction Engineers (RAL). The pilot group was drawn from 9 construction companies. Specification of the curriculum and qualification, and implementation of the pilot were by the Lahti Institute of Technology in collaboration with the National Board of Education (NBE), the Confederation of Finnish Construction Industries (CFCI) and the Federation of Private Sector Construction Engineers (RAL). Assessment was very practical, and in accordance with the competences specified.

Next there will be a Production Qualification II piloted at level 5, aimed at production management.

Standards of Competence In the UK

Since 1984, British industry, encouraged by Government, has been setting standards of competence for all sectors and occupations. These standards form the basis for a five level framework of National and Scottish Vocational Qualifications. It arises from the Government's call for a work force which is 'highly skilled, technically competent, versatile, adaptable and mobile'.

As a basis, Government proposed defining employment-led specifications of competent performance at work. They are therefore concerned with what individuals can do, not just what they know. They are about what people should achieve in the workplace to become effective. They promote industry best practice and have been developed by industry practitioners. 'At the heart of this initiative lie Standards of a new kind. These should be explicit, agreed, widely accessible, flexible, progressive and testable'.

How to Develop Standards of Competence

CISC's advice on developing standards of competence:

- Identify all the occupations that need to be covered
- Focus on a description of the 'key purpose' they serve in the industry
- Identify the main functions that enable the purpose to be achieved
- Break down the main functions until you reach a level of detail when you can identify the outcomes for which an individual is responsible
- Set out the Standards defining:
 - the end results by which competent work performance can be measured
 - the range of situations to which the area of competence applies
 - and the evidence that will be needed to show that the individual is competent
- Check that the standards are reasonable
- Review them regularly

5.3 QUALITY

The CPD system includes a Quality component, which monitors and reviews all aspects of the *Framework* in order to maintain and enhance quality. Both the outputs and the actual processes are monitored, to prevent CPD becoming an abstract and unproductive exercise.

The nature and scale of the monitoring reflect the needs, culture and capacity of the *organisation*. The results of the monitoring are fed back promptly to all those concerned (eg those responsible for improving and adding value to the CPD system, or responsible for remedial action).

The quality component is specified in writing to avoid ambiguity, but what is done is more important than what is written. A culture of continuing improvement will be more effective than any formal system imposed from above or outside.



Organisation Step 11: Monitor and Review CPD System

11a) The person responsible for the CPD system monitors each of the components in an informal way, feeds back the results and initiates correction and improvement.

or

11b) Do the same as 11a), but in a formal way, as a periodic special exercise.

or

11c) Do the same as 11b), but using an external agency to verify that the organisation and its members are complying with the CPD system.



The output records are easily monitored, and provide a clear basis for feedback. Although necessary, the output records are of much less significance to quality than monitoring the processes.

Possible means of monitoring the processes (in addition to monitoring the output records) are: asking (using a structured interview face- to-face/by phone/during a meeting or via a questionnaire) individual participants (eg those you meet/a representative selection/on a statistically random basis), how they performed their review, and what they did to prepare their profile of competence and the profile of needs. Find out: what they found difficult, what they found least important/most important, how they would do it differently next time and what benefits they have found. Ask others involved in each of the components (eg line managers, mentors, training department).

Identify what can be monitored to evaluate achievement of the aims and objectives of the CPD system (see Steps O2 and I2) and to ensure good practice in each of the eleven components. Decide how they can be monitored in practice (by whom, how resourced, to whom reported, how frequently). Carry out the monitoring, and provide periodic reports.

The provision of development activities (eg courses) is the key area for more systematic quality control, and some systems have already been developed: AQUAFORCE (by FEANI), CertQUA (in Germany).

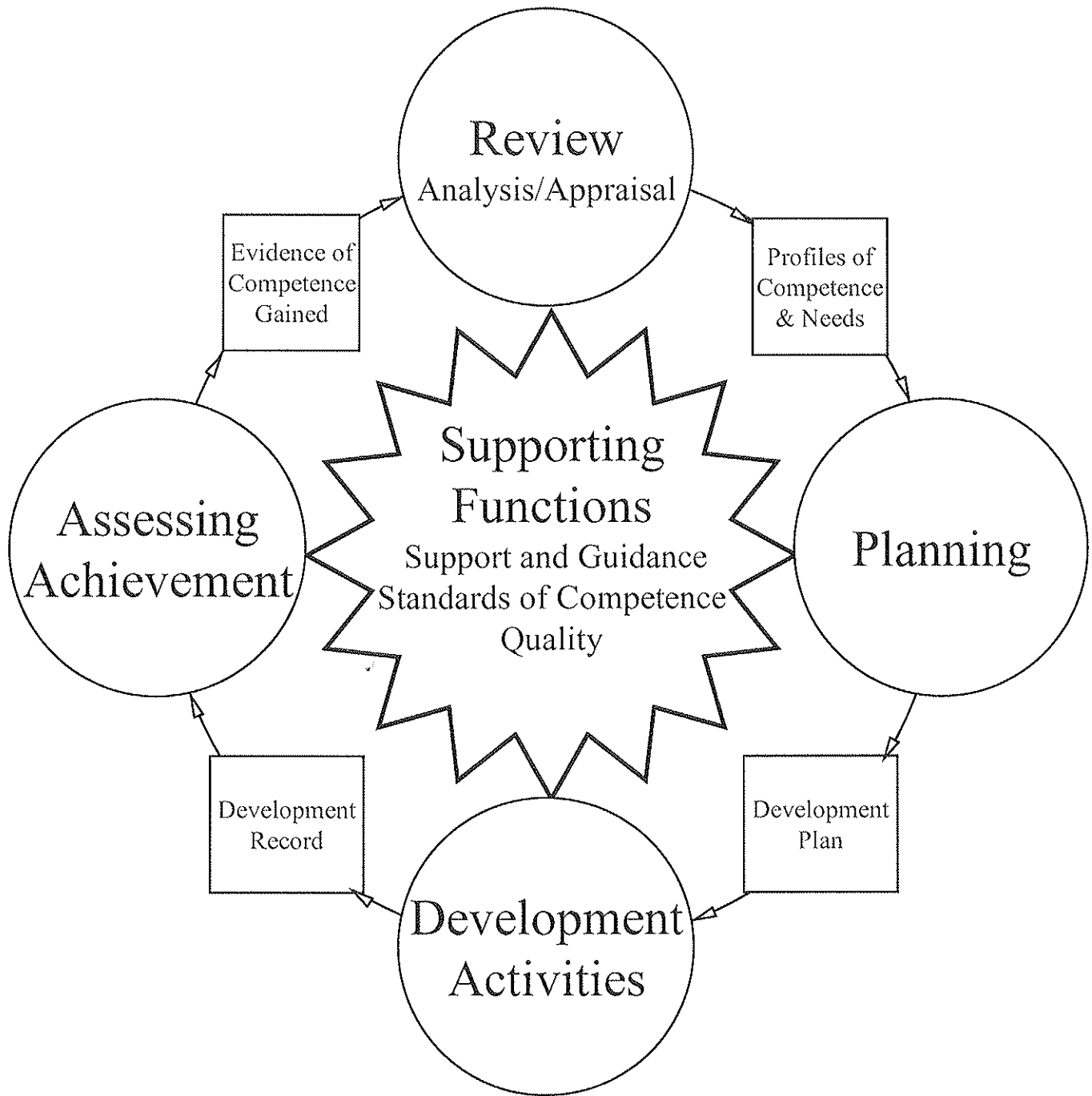
Although not necessary for this Framework, organisations may wish to extend their formal quality assurance scheme (eg ISO 9000) to cover CPD, and especially to cover provision of training.

If information is collected on an anonymous/confidential basis or by people with no authority over the practitioners, then the information is more likely to be reliable. However, the monitoring can enable the organisation to identify weak CPD performance by individuals, which will motivate others to give it greater priority.

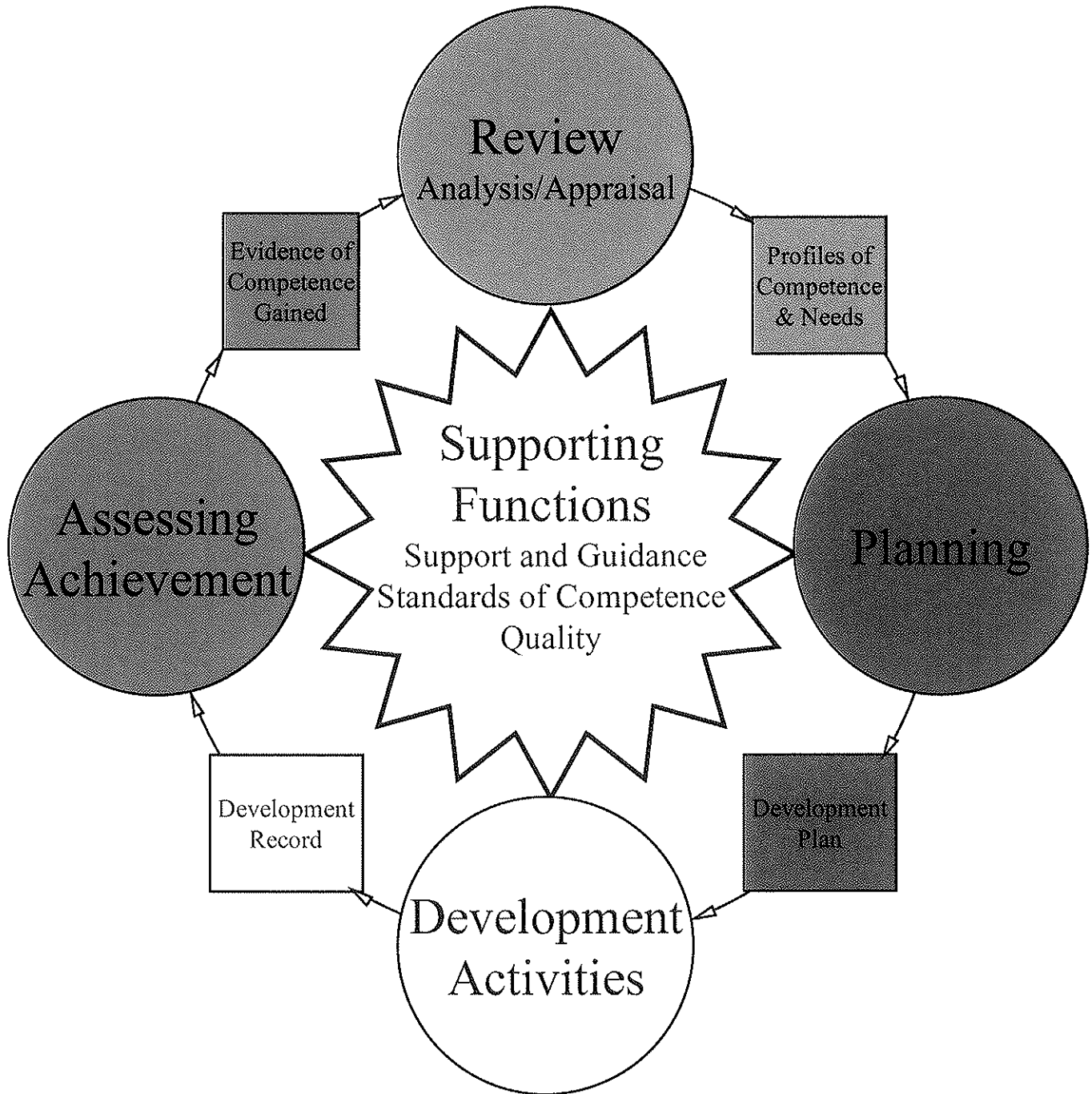
Storing the Records

In UK, individuals are able to keep their records of the four processes together in the National Record of Achievement.

Framework for CPD Systems



Framework for CPD Systems



Appendix A EUCCCCIP Partners

Organisation	Contact person	Street & N°	Town / City
EVITech (Espoo-Vantaa Institute of Technology)	Pertti Törmälä	Vanha maantie 6	Espoo
CFCI (Confederation of Finnish Construction Industries)	Johanna Varis	Unioninkatu 14	Helsinki
NBE (National Board of Education)	Raii Laasonen	Hakaniemenkatu 2 (PL 380)	Helsinki
RAL (Rakennusteknisten Ammatillitto – Union of Finnish Construction Technicians & Engineers)	Esa Koukkari	Hopeatie 1 A 5	Helsinki
IEI (The Institution of Engineers of Ireland)	Christine Somers	22 Clyde Road	Ballsbridge Dublin
FAS (Foras Aiseanna Saothair - Training and Employment Authority)	John McGrath	PO Box 456, 27-33 Upper Baggot Street	Dublin
CIF (Construction Industry Federation)	Mike Jones	Construction House, Canal Road	Dublin
IEFP (Instituto do Emprego e Formação Profissional – Institute of Employment & Vocational Training)	Ana Tonilhas	Rua de Xabregas, 52-2°	Lisbon
OEng (Ordem dos Engenheiros - Association of Engineers)	António Canha da Piedade	Avenida de António Augusto de Aguiar n° 3-D	Lisbon
CISC (Construction Industry Standing Conference)	David Cracknell	The Building Centre, 26 Store Street	London
QCA (Qualifications and Curriculum Authority)	Irvin Draycott	222 Euston Road	London
SQA (Scottish Qualifications Authority)	Alan McDonald	Hanover House, 24 Douglas Street	Glasgow
EngC (The Engineering Council)	Chris Senior	10 Maitravers Street	London
CIC (Construction Industry Council)	John Waikerdine	The Building Centre, 26 Store Street	London
CPD (Cambridge Professional Development)	Nigel Lloyd	66 De Freville Avenue	Cambridge

Post Code	Country	Telephone	Fax	E-Mail
FIN-02600	Finland	(358) 9 511 961	(358) 9 511 9988	pertti@evitech.fi http://www.evitech.fi
FIN-00130	Finland	(358) 9 129 9245	(358) 9 129 9214	johannavaris@rtk. memonet.mailnet.fi
FIN-00530	Finland	(358) 9 7747 75	(358) 9 7747 7160 or: - 7756	raili.laasonen @oph.fi
FIN-00440	Finland	(358) 9 503 1542	(358) 9 503 1565	
4	Ireland	(353) 1 668 4341	(353) 1 668 5508	enged@iol.ie http:// www.failte.com/iei/
4	Ireland	(353) 1 668 5777	(353) 1 668 2691	
6	Ireland	(353) 1 4977487	(353) 1 49 66953	cif@indigo.ie
P-1900	Portugal	(351) 1848 2967	(351) 1 868 2553	
P-1068	Portugal	(351) 1 356 2438 or 841 8439	(351) 1 352 4632 or 849 7650	
WC1E 7BT	UK	(44) 171 323 5270	(44) 171 436 3280	mail@cisc.org.uk http://www.cisc.org.uk
NW1 2BZ	UK	(44) 171 728 1820	(44) 171 916 5799	info@qca.org.uk
G2 7NQ	UK	(44) 141 242 2172	(44) 141 242 2244	mail@sqa.org.uk
WC2R 3ER	UK	(44) 171 240 7891	(44) 171240 7517	Csenior@engc.org.uk http://engc.org.uk
WC1E 7BT	UK	(44) 171 637 8692	(44) 171 560 6140	sholle@cic.org.uk
CB4 1HU	UK	(44) 1223 511679	(44) 1223 519669	Nigel@camprof.demon.co.uk http://www.camprof.demon.co.uk/ euscccip.htm

EUSCCCIP

**CONTINUING PRACTITIONER
DEVELOPMENT**

APPENDIX 'C'

RECORD BOOK

CHECK LIST

CHECKLIST/ MODEL PROFORMA

CONTENT

- 1 INTRODUCTION
- 2 PERSONAL DETAILS
- 3 CAREER RECORD
- 4 PROFILE OF COMPETENCE
- 5 PROFILE OF NEEDS
- 6 DEVELOPMENT PLAN
- 7 DEVELOPMENT RECORD
- 8 EVIDENCE OF COMPETENCE GAINED

1 INTRODUCTION

The individual practitioner – whatever his or her seniority, function and status – is ultimately responsible for their own Continuing Practitioner Development. The EUSCCCIP Record Book is primarily for the use of those individuals who, having recognised that responsibility, design their own structured CPD, while at the same time, taking full advantage of the support and contribution of others.

The EUSCCCIP Record Book sets out a checklist of the main features which can be included in a CPD Record. These features are derived from the EUSCCCIP Framework for CPD systems:

- *its four essential processes:*
 - *Review*
 - *Planning*
 - *Development Activities*
 - *Assessing Achievement*
- *their resulting outputs:*
 - *Profiles of Competence and Needs*
 - *Development Plan*
 - *Development Record*
 - *Evidence of Competence Gained*
- *its three supporting functions:*
 - *Support and Guidance*
 - *Standards of Competence*
 - *Quality*

The use of a CPD Record Book is an important way of ensuring ‘quality’ within CPD by providing a written record of the individual’s development.

In the interests of compatibility and transparency between different organisations and different countries, the CPD record Book is set out in a general way so as to provide for both the wide range of individuals and organisations who will use it, as well as a variety of evolving needs and approaches.

The Record Book is a checklist enabling the individual to record both ambitions and achievements and can be used, therefore, as a proforma for a work-place diary.

2 PERSONAL DETAILS

This section sets out details of your personal circumstances.

Name:

Date of birth:

Home address:

Home telephone/ fax/ e-mail Numbers:

3 CAREER RECORD

This section sets out and enables you to maintain details of your career and qualifications. This will be useful when you have to compile a curriculum vitae/ resumé for a future employer or client. It will also help you and anyone advising you when planning your CPD needs. For this reason it is important to keep this record up-to-date as new career changes and achievement occur.

Employment

Firstly, list your present employment details, followed by previous employers. Include all the jobs you have held and the period you held them. Set out your duties and responsibilities in each job and include any work experience (in the form of performance or knowledge) which you think was important and that someone else might find relevant.

Present Employer:

Work address:

Work telephone/ fax/ e-mail Numbers:

Date from:

Job title:

Job details including duties and responsibilities:

Work experiences:

Previous Employers:

Work address:

Date from/ to:

Job title:

Job details including duties and responsibilities:

Work experiences:

Qualifications and credits

Secondly, list the formal qualifications and credits which you have already achieved. It can include all relevant academic, vocational and professional awards, including their levels or grades. Include any development experience (in the form of performance or knowledge) which you think was important and that someone else might find relevant.

Academic qualifications:

Title:

Qualifying body:

Details of levels/ grades:

Dates:

Development experiences:

Vocational Qualifications:

Title:

Qualifying body:

Details of levels/ grades:

Dates:

Development experiences:

Professional Qualifications:

Title:

Qualifying body:

Details of levels/ grades:

Dates:

Development experiences:

4 PROFILE OF COMPETENCE

This section set out a review of your personal and career work experiences. You may need to obtain some guidance from your employer, professional institution or a mentor to help you. Identify the standards against which you can measure your workplace performance and achievements. Record performance and knowledge which you have already achieved against your identified standards as your profile of competence.

Description of the areas of competence and their scope:

The standards of competence identified:

Source of the standards of competence and their reference:

Level of competence achieved – performance and/ or knowledge:

Comments, including identification of whether these current areas of competence have been assessed by yourself, by others, or by formal qualification:

5 PROFILE OF NEEDS

This section set out an analysis of your future job and career needs and requirements. You may need to obtain some guidance from your employer, professional institution or a mentor to help you. Identify the standards against which you can measure your intended workplace performance and achievements.

You will need to set out a profile of your present and future competence needs and compare it with your current profile of competence. Where you find some of these areas of current competence do not meet your present work requirements or career ambitions, this represents your profile of development needs. You should set out the objectives/ end results (outputs) that you want to achieve. These outputs may be in the form of things you need to know about or things you need to be able to do. Your objectives need to be specific, relevant, capable of being measured, achievable by you within an appropriate timescale.

Identify current job demands, changes in practice, future job roles, career challenges and aspirations and compare with current profile of competence:

Description of the areas of required future competence and their scope:

The standards of competence identified:

Source of the standards of competence and their reference:

Level of competence required – performance and/ or knowledge – your development needs/ objectives:

Comments, including identification of whether these areas of competence will need to be assessed by yourself, by others, or by formal qualification:

6 DEVELOPMENT PLAN

This section set out an outline plan of how you intend to achieve your development needs. You may need to obtain some guidance from your employer, professional institution or a mentor to help you. Identify the most appropriate learning and development activities to meet your profile of needs. It is important to consider your objectives, the opportunities available, your preferences and any constraints on what you can do.

Objectives – achieve necessary work performance and/ or acquire necessary knowledge required for performance:

Priorities:

Target date(s):

Method – direct work experience opportunities, informal self-directed learning or formal structured learning:

Constraints – obligatory/ mandatory requirement of employment/ professional institution, availability, cost, cost-effectiveness, suitability for need, preferred style of learning:

Necessary resources required:

Necessary support and help required:

Controls and responsibilities for action:

Outcomes/ evidence of successful achievement to be targetted:

Competence and achievement will be assessed by yourself, by others, or by formal qualification:

7 DEVELOPMENT RECORD

This section sets out a record of how you actually achieve the objectives in your development plan.

Record of direct work experience opportunities undertaken:

Intended development objectives:

Key standards/ areas of competence/ scope/ sources/ reference/ level:

Nature of activity:

Your role in the activity:

Context and others involved:

Duration and dates:

Actual direct work performance of a function:

Acquisition of necessary knowledge required for performing a function:

Consequences – outcomes/ evidence targetted and assessed:

Personal evaluation:

Record of informal self-directed learning undertaken:

Intended development objectives:

Incidental experience, challenges and contacts – unplanned work experience, private study etc.:

Key standards/ areas of competence/ scope/ sources/ reference/ level:

Nature of activity:

Your role in the activity;

Context and others involved:

Duration and dates:

Acquisition of necessary knowledge required for performing a function:

Actual direct work performance of a function:

Consequences – outcomes/ evidence targetted and assessed:

Personal evaluation:

Record of formal structured learning undertaken:

Title of course/ activity (including distance learning, conferences, presentations, research):

Course provider:

Location:

Duration and dates:

Intended development objectives:

Key standards/ areas of competence/ scope/ sources/ reference/ level:

Acquisition of necessary knowledge required for performing a function:

Actual direct work performance of a function:

Consequences – outcomes/ evidence targetted and assessed:

Personal evaluation:

8 EVIDENCE OF COMPETENCE GAINED

This section sets out a record of evidence resulting from your development activities which can be assessed and measured against your development plan objectives and their identified standards for achievement. This will enable you to identify new and improved areas of competence which you have achieved.

Intended development objectives:

Key standards/ areas of competence/ scope/ sources/ reference/ level:

Evidence from direct work experience opportunities, informal self-directed learning and formal structured learning:

Evidence of actual direct work performance of a function:

Evidence of acquisition of necessary knowledge required for performing a function:

Assessed by yourself, by others, or by formal qualification:

Assessment additionally verified by others:

Personal evaluation:

Further action

Add newly achieved and assessed competence to your career record and profile of competence:

Inform those who need to know of your achievements (employer, professional institution etc.):

Since the EUSCCCIP CPD Framework is a cyclical process it is important to regularly review your profile of competence and plan your further development accordingly.

Appendix D Interested Parties in the CPD System

Examples of Practitioners' Involvement in the CPD System

Component	Input by Practitioner	Result used by Practitioner
Review	Review own competence	Use review to record profiles
Profiles of competence & needs	Record own profiles	Use profile of needs to plan CPD
Planning	Plan own CPD	Use planning to write down development plan
Development Plan	Record own development plan	Implement development plan
Development activities	Undertake development activities	Use development activities to gain new competences
Development record	Keep record of development activities	Reflect on development record to improve learning skills
Assessing achievement	Assess own competence	Use self-assessment to decide on external assessment
Evidence of new competence	Assemble evidence for external assessment	Submit evidence to gain qualification
Support & guidance	-	Use information to select development activities
Standards of competence	-	Define own competence using standards of competence
Quality	Report annually to employer on own CPD progress	Use annual CPD report for personal review of CPD

Examples of Training Providers' Involvement in the CPD System

Component	Input to Practitioner by TP	Result used by TP
Review	Course assessments (from TP) used by practitioner when reviewing competence	-
Profiles of competence & needs	-	TP uses practitioner's profiles of competence & needs to tailor course
Planning	Course prospectus used by practitioner to select course	-
Development Plan	-	TP identifies widespread need from development plans and so designs training activity
Development activities	TP provides development activities	TP monitors performance of all participants for quality system
Development record	TP provides info in standard format for practitioner's development record	-
Assessing achievement	TP assesses practitioner's competence at end of course	TP monitors competence of all participants for quality system
Evidence of competence	TP issues certificate of competence	TP maintains records for external verification
Support & guidance	TP advises practitioner by phone & with brochure	TP maintains records of all enquiries for quality system

Examples of Employers' Involvement in the CPD System

Component	Input to Practitioner by Employer	Result used by Employer
Review	Practitioner uses performance appraisal to review competence	-
Profiles of competence & needs	Employer provides info on required competences - used by practitioner for profile of needs	Employer uses practitioner's profile of competence for pay, & profile of needs to design course
Planning	Line manager helps practitioner to define priorities	Line manager plans to delegate to practitioner
Development Plan	Employer provides company programs for development plan	Dev't plans show widespread need so Employer gives training
Development activities	Employer provides development opportunities	Employer monitors practitioner for performance management
Development record	Employer provides company programs using standards of competence	Personnel Department keeps copy of development record on participants' file
Assessing achievement	Project manager assesses practitioner's competence at end of project	Employer monitors competence of all employees for annual review of training
Evidence of new competence	Materials produced at work used as evidence of competence	Employer records practitioner's competence
Support & guidance	Personnel department advises practitioner on opportunities	Personnel Dept keeps records of all enquiries for quality system
Standards of competence	Employer expresses its training procedures using competences	Employer monitors staff competences and revises classification
Quality	Employer provides procedures and resources for training	Practitioner provides information for employer's quality system

Examples of Professional Institution's Involvement in the CPD System

Component	Input to Practitioner by PI	Result used by PI
Review	Profile of competence expected by PI used by practitioner when identifying needs	-
Profiles of competence & needs	-	PI uses practitioners' profiles of competence & needs to monitor profession
Planning	PI provides practitioner with info on courses available	-
Development Plan	PI requires practitioner to prepare self-development plan	PI identifies widespread need from development plans and so designs training activity
Development activities	PI provides development activities eg meetings, courses	PI monitors satisfaction of all participants for quality system
Development record	PI provides info in competence standard format	PI monitors sample of members' development records for its quality system
Assessing achievement	PI assesses practitioner's competence for membership	PI monitors competence of members for
Evidence of new competence	Practitioner uses PI membership certificate to prove competence	PI maintains records for quality system
Support & guidance	PI advises practitioner by phone & with brochure	PI maintains records of all enquiries for quality system

Standards of competence	TP expresses its course outcomes as competences	-
Quality	Certificate issued by TP noted by employer's quality system	Practitioner fills questionnaire for TP's quality system

Key: ↻ Process, ⇄ Outputs, ⚙ Supporting Functions, TP Training Provider

Standards of competence	PI expresses its membership requirements as competences	PI monitors members' competences and revises classification
Quality	PI membership noted by employer's quality system	Practitioner fills questionnaire for PI's quality system

Key: ↻ Process, ⇄ Outputs, ⚙ Supporting Functions, PI Professional Institution

Appendix E International Organisations Promoting CPD for Construction Industry Practitioners

Organisation	Contact person	Street & N°	Town / City
FEANI (Fédération Européenne d'Associations Nationales d'Ingénieurs)	Sirkka Pöyry	21 rue du Beau Site	Brussels
FIEC (Fédération de l'Industrie Européenne de la Construction)	Ulrich Paetzold	Avenue Louise 66	Brussels
FIG (International Federation of Surveyors)	Tom Kennie	12 Great George Street	London
SEFI (European Society for Engineering Education)	Françoise Côme	Rue de la Concorde 60	Brussels
IACEE (International Association for Continuing Engineering Education)	Markku Markkula	Dipoli, PO Box 8000	HUT
UIA (International Union of Architects)	Vassilis Sgoutas	51 Rue Raynourard	Paris
ECBP (European Council for Building Professionals)	General Secretary	"Airlie", Lovel Road, Winkfield	Berkshire
ACE (Architects Council of Europe)	Alain Sagne	Box 10, 207 Avenue Louise	Brussels
WFEO (World Federation of Engineering Organisations) /FMOI (Fédération Mondiale des Organisations d'Ingénieurs)	Pierre-Edouard de Boigne, Executive Director	Maison de l'UNESCO, 7 rue Miollis	Paris
REHVA (European Federation of Heating, Ventilating & Airconditioning Associations)	AJ Weijert	De Mulderij 12,	Leusden
ASHRAE (American Society of Heating Refrigeration and Air-conditioning Engineers)		1791 Tullie Circle, N.E.	Atlanta
CEDEFOP (European Centre for the Development of Vocational Training)		Marinou Antipa 12	Thessaloniki

Post Code	Country	Telephone	Fax	E-Mail
B1050	Belgium	(322) 639 0390	(322) 639 0399	sirkka.poyry@feani.com
B1050	Belgium	(32) 514 5635	(322) 511 0276	FIEC-BRU@mcrl.poptel.org.uk
SW1P 3AD	UK	(44) 171 334 3796	(44) 171 334 3719	figw@rics.co.uk
B1050	Belgium	(322) 540 9770	(322) 540 9715	SEFI.COME@infoboar.d.be
02015	Finland	(358) 9 451 4028	(358) 451 4060	IACEE@hut.fi
75016	France	(33) 14 52 43 688	(33) 14 52 40 278	uia@uia-architectes.org
SL4 2EU	UK	(44) 1344 884963	(44) 1344 884963	renart@ibm.net
B1050	Belgium	(322) 645 0905	(322) 645 0964	ace.cae@skynet.be
75732	France	(33) 145 68 49 12 or (33) 608 69 79 74	(33) 145 68 49 14	pdeboigne@fmoi.org
3831 NV	Netherlands	(31) 33 434 57 50	(31) 33 432 15 81	Secretary@cibse.org http://www.cibse.org/rehva.htm
GA 30329	U.S.A.,	(1) 404 636 8400 x307	(1) 404-321-5478	spengler@ashrae.org http://www.ashrae.org
GR-57001	Greece	(30) 31 490 111	(30) 31 490 044	ag@cedefop.gr

Appendix F Glossary

benchmark: an example of good practice that can serve as a basis for comparison

best practice: the finest examples that can be found of the way to do something

checklist: a list of things to be included, which can be used to check or record progress, or compliance (e.g. a shopping list)

competence: the ability (including knowledge, skill and understanding) to perform to standards required in employment across a range of circumstances and to meet changing demands

CPD proformas: the forms on which you record when carrying out a CPD process; they are used as part of the CPD system, to structure and record it

development plan: the setting down in detail of an individual's firm intentions towards acquiring specific knowledge, skills and understanding

flexibility: the ability of a resource to be useful in a different context (e.g. an individual to perform a different role)

framework: a generalised model structure for a system

good practice: an example of a successful way to do something

individual practitioners: including those working in organisations as employees, the self-employed, and the unemployed

mandatory: the organisation requires the practitioner to furnish proof of compliance, typically every year

mentor: a more experienced person who assists and guides the practitioner's development, placing the practitioner's interests before the interests of the organisation

obligatory: the practitioner undertakes (eg by signing agreement to a code of conduct) to do CPD; the practitioner is expected to fulfil the obligation. Although not being required to furnish evidence every year, the practitioner is expected to have the evidence and produce it if requested

organisations: including commercial enterprises, public sector employers, professional institutions, trade unions and other organisations with individual practitioners as members or employees

outcome: the end result achieved; those things which people at work have actually done

personal development planner/manager: a record book or software package which helps individuals set down their development plan and organise their CPD

practitioner: a technical or professional person individual who practises in the (construction) industry

profile of competences: the complete list of competences which an individual has achieved

profile of needs: the list of those competences which an individual needs to achieve but has not yet

record book: a book in which to store details of your education, training, qualifications, experience and professional career; it is often called a logbook. The record book may contain CPD proformas which help you to structure the CPD process as you fill them in, and it may contain pockets to store documents like certificates and curriculum vitae

registration: (for UK engineers) achieving all the requirements for membership, becoming qualified, being added to the Engineering Council's list of qualified engineers

standards of competence: a specification of expected performance in employment

SMART: Specific, Measurable/ tangible, Achievable but challenging, Responsibilities & resources defined, Time-bounded

transferability: the ability to continue performing adequately in a new context (e.g. the same competence being applied in a different industrial sector or country, or a qualification of one country being acceptable in another)

voluntary: the practitioner is free to choose whether or not to do CPD