

Mandatory Competence Attainment Report Guidance

For Chartered and Fellow Membership

CIWEM mandatory competence attainment report guidance

Mandatory competencies provide the opportunity to show the formal and informal skills and qualities that you have developed throughout your career. They demonstrate your ability to work independently and as a team, to take initiative and to work effectively and apply yourself to a variety of situations

Please provide a response to each of the CIWEM Mandatory Competencies in the relevant section of your online application. The maximum number of words for the CIWEM report is 4000 words; the distribution between individual competencies is at your discretion to best demonstrate your experience. However, please give due consideration to all competencies in your submission; no competence can be left blank.

Also, please note that **appendices, references and footnotes will not be accepted.**

You need to use examples from your practical experience to demonstrate the appropriate level of achievement for each competence. Images and diagrams can be included to support responses in the 'CV and other supporting documentation' section of the online application.

Your responses need to be written in the **first person** and identify *your* roles and responsibilities, what *you* have done and what *you* have learned. If you were part of a team you need to identify what you personally did, describing your contribution to the overall aim of the specific project or piece of work.

You normally need to provide two examples that demonstrate the appropriate level of attainment for each mandatory competence. The competence report is your opportunity to demonstrate that you are working at a level appropriate to the registration/s for which you are applying.

The CIWEM mandatory competencies relate solely to CIWEM membership. If you are applying for registration with the Engineering Council (CEng/IEng/EngTech), Science Council (CSci) or Society for the Environment (CEnv), then you also need to complete the list of competencies relevant to the particular registration you are seeking.

Each of these are given in the online application and you are provided with an additional 4000-word limit for each registration for which you are applying. You should ensure that through your responses you demonstrate the requirements of the relevant external registration body. You can obtain guidance for completing the competence for each of these external bodies on their respective web sites:

Engineering Council	www.engc.org.uk/
Science Council	www.sciencecouncil.org/
Society for the Environment	www.socenv.org.uk/

Guidance on completing each individual CIWEM competence is given below.

Please note that you do not have to address all of the questions under each competence, they are there to help you think about your responses to the Mandatory Competence.

A competencies – existing and emerging factors influencing environmental and water issues

A1. Knowledge of wider environmental issues and trends (which may be related to, but not constrained, by your area of expertise).

You should be able to demonstrate that you have a breadth of knowledge and have an awareness of the development of the sector in which you operate and how it has developed over time with a view to future issues and development. You should be able to demonstrate a relevant understanding of legislation, local/national/international directives, financial and societal drivers within your industry.

- Do you understand what the main issues and drivers are in your industry?
- Do you understand the wider context of your position in the environmental sector?
- What knowledge do you require in your day to day role?
- Where do you find the information you require?
- Do you research outside of your discipline?
- How is the industry regulated?
- How do you keep up to date?
- What legislation drives the business of your employer or clients?
- How has your employer or clients developed their business to cope with changing regulation, legislation or funding pressures?
- How has your employer or clients developed their businesses to meet the challenges or opportunities presented by evolving technology?
- How can new technologies help you to meet future requirements?
- What other environmental issues are your company involved in outside of your area?
- Can you explain an important current environmental issue in your region?

A2. Ability to develop strategies or plans to address changes in your sector

You will need to demonstrate that you can identify, monitor and review changes (e.g. financial, technological or legislative) within your sector by preparing strategy at a personal, team and/or organisational level. The impact of the change on individual / team / organisational workloads and revenues should be identified and you should demonstrate your ability to put appropriate planning frameworks in place to prepare for change. You will be able to identify gaps in your knowledge and information and be able to conduct appropriate research.

- What are the main changes affecting your sector?
- What strategies have you devised and implemented to address these changes?

- What strategies have you devised and implemented to help your employer or clients evolve to meet external pressures?
- How do you identify that further information is required?
- How does your work help to achieve the company's strategy?
- Have you developed a new standard, system or service which has been adopted for future strategy?
- What actions/initiatives have you developed and implemented to address changes and/or developments? Have they been adopted by other members of your team/organisation?
- Have you established a programme of research or investigation to supplement existing information?
- What strategies does your employer have in place to address external challenges and how do you contribute to the achievement of these strategic aims or goals?

B Competencies – Planning, implementation and evaluation of work

B1. Ability to analyse and evaluate environmental and/or water problems

You may wish to identify a project or a piece of work for which you have had responsibility (e.g. community / user / infrastructure / environment / economic / compliance) demonstrating that you understand why the work is needed and the implications of potential solutions. Undertake research (site surveys / mapping / desktop research) to demonstrate you have considered the implications of potential solutions, including the legislative, social, historical, ecological, environmental and/or financial as appropriate, this will include all stakeholders' perspectives (client / public / regulators / users).

- What was the problem or opportunity you needed to address?
- What research/investigation did you carry out?
- What were the main factors (including topography, other services, funding, hydrology, compliance standards etc) which needed to be considered in investigating the problem and considering potential solutions?
- Who were the stakeholders?
- How did you consult with key stakeholders?
- How did you ensure that the nature and extent of the problem was fully understood?
- Did you prepare and agree a brief for investigatory work?
- When evaluating problems, what is the importance of professional neutrality?

B2. Ability to solve problems by identifying, developing and evaluating options

You should demonstrate the use of advanced scientific / engineering / management / environmental principles as appropriate when formulating potential solutions to a problem. You will need to demonstrate that you have considered the implications of each method of working or solution; identifying the solution that best fits with the issues and requirements identified (e.g. regulatory / legislative / social / economic / environmental / customer). You will use evidence to support the recommended solution and be able to show how the decision was made.

- What solutions did you identify and consider?
- What were your priorities?
- What was the purpose and result of this prioritisation?
- What evaluation did you undertake?
- What were the evaluation criteria?
- Which solution did you recommend and why?
- How did you use creative and original thought in identifying potential solutions?
- How did you compare widely differing options to find the best solution?
- How do you illustrate your method of presenting your analysis and options to a client?

B3. Ability to initiate, implement and manage change

You will need to demonstrate you can deal with the unexpected, when change occurs during your work (e.g. plan, initiate, monitor and revise). You will need to demonstrate the ability to prepare, control and plan for change / new development (e.g. coordination of documents, systems and services / preparation of procurement, contract and production documents) ensuring legal compliance, budgetary control and communication with clients / stakeholders.

- Did anything threaten the success of a solution or its delivery?
- What were your options?
- Was it successful? If not why not?
- How did you plan for the introduction of change?
- What steps did you take to ensure stakeholder buy-in?
- How did you resolve any problems?
- How did you deal with contractual risks?
- How did you deal with risk?

B4. Ability to plan and implement solutions and monitor their continuing performance

You will need to demonstrate that you can effectively plan for and implement solutions (e.g. services, research, development...) complying with appropriate standards (e.g. H&S, QA, costs, resource management...) identifying risks that may compromise the outcome (e.g. risk register...). You will demonstrate that you can evaluate performance against the initial specification that was agreed with the client / stakeholders. You will need to demonstrate the ability to learn from and amend operating procedures using performance criteria and data collection as appropriate.

- How did you plan the implementation of a solution?
- How did you manage the implementation?
- What were the main issues affecting implementation?
- How did you monitor the performance of the solution?
- How did you determine the root cause of any problems?
- What actions did you initiate to resolve any unsatisfactory performance?

- What plans were prepared to ensure continuing operation?
- What mitigating actions did you put in place to minimise risk?
- Have you carried out an audit or post project appraisal?
- Did the solution achieve what was expected of it?
- If the solution did not achieve what was expected of it what corrective action did you take?
- Did you produce relevant documentation or a training package?

C Competencies – safe and effective working practices

C1. Ability to manage resources effectively and efficiently

You will be expected to demonstrate how your working practices contribute to your organisation or workplace (financially, technically and professionally). You could, for example, demonstrate an understanding of the recruitment and selection process of resources and manpower or a project/piece of work and how to work effectively to deliver your responsibilities on time, to the appropriate standards and to budget. You could also identify training needs / skills gaps, opportunities to utilise new and emerging technologies / processes and to promote sharing of best practice and knowledge, including your ability to assess the changing requirements of your organisation's industry.

- How do you fulfil your responsibilities in a timely and professional manner?
- Do you have budgetary responsibilities and/or understand the budgetary process?
- What resources are managed / how do you ensure efficiency?
- What have you introduced to improve performance?
- How do you secure appropriate resources?
- Have you optimised a system or process to maximise efficiency?
- What training have you prepared/delivered?

C2. Understanding, promotion and application of Health and Safety (H&S)

You will be expected to demonstrate your implementation of relevant H&S policy and legislation (e.g. including, but not limited to, organisation H&S policy, HASAW act, Confined Spaces, CDM 2007...), your understanding and promotion of safe working practices for all stakeholders. You will be expected to demonstrate that there are clear processes in place to investigate and record accidents, promoting a preventative approach to H&S.

- What H&S legislation is relevant to your work?
- How do you keep up-to-date with the requirements?
- What actions do you take to ensure compliance with H&S requirements in the planning and implementation of your work?

- What are the responsibilities of you and others?
- How do you ensure that others fulfil their responsibilities?
- What is the procedure for recording and investigating near misses?
- How do you deal with an unsafe act?
- How do you encourage others to apply appropriate H&S standards?
- How do you apply safe systems of work?
- Are you an engineer? Do you know about CDM?

C3. Your contribution to sustainability

You will be expected to explain your understanding of the term sustainability and give practical examples of how you have implemented your definition. You could for example demonstrate the need to minimise waste, manage the use of non-renewable resources, monitor and review energy consumption, recycle and promote use of alternative materials. You may wish to carry out an audit of your workplace to assess its sustainability credentials.

- What impact does your work have on the environment?
- What measures have you taken to minimise negative impacts?
- What environmental improvements have you identified and delivered?
- How do you define sustainability?
- How do you encourage others to adopt a sustainable approach?
- How do you implement sustainability principles in your personal life?
- What examples of sustainability have you incorporated into a project?
- What actions do you take to minimise impact on the environment?
- How do you balance economic, environmental and societal factors?
- How do the outputs of your work contribute to sustainability?
- How do you promote sustainable solutions?

C4. Understanding, promotion and application of quality enhancement and Quality assurance (QA)

You could discuss your knowledge of quality management requirements relevant to your discipline, this will include the need to deliver your responsibilities to established standards and contribute to continual improvement. If you use data collection and/or interpretation, you could demonstrate you can assess the accuracy, quality and data reliance to deliver appropriate recommendations. You could also show how you identify, implement and evaluate changes to meet quality objectives.

- Do you or your organisation work to any QA system?
- Do you understand and comply with its requirements?
- What are the benefits of QA in your work environment?
- Have you developed any processes or procedures to ensure consistency of approach to the required standard?
- How do you ensure the integrity of information in your workplace?

- How do assess the accuracy of your data?
- How do you promote the principle of quality assurance to colleagues?

D Competencies – communication and professional ethics

D1. Ability to communicate in English

You will need to demonstrate that you can communicate effectively.

This competence will be largely judged on the basis of your application (including the report) and your interview which includes a presentation. Examples could include a brief statement to demonstrate where you have contributed to, chaired or recorded actions in meetings; written guidance documents/specifications/letters/technical reports distributed to clients and colleagues, prepared and delivered presentations to a variety of stakeholders.

D2. Work professionally, ethically and comply with relevant codes of conduct

You will need to demonstrate that you understand CIWEM's, your organisation's and other relevant Codes of Conduct and promote them to your colleagues to ensure that you are complying with the required standards and promoting professionalism. You will need to demonstrate how you adhere to all relevant legislation and regulatory frameworks (e.g. employment legislation...). You will need to demonstrate that you think and act professionally and impartially. You will be aware of the limits of your own knowledge, expertise and competence and when to seek advice / guidance. You will be aware of the CIWEM Code of Ethics and strive to deliver the most appropriate solutions for all stakeholders.

- What codes apply to you – how do you comply?
- How do you deal with stakeholders?
- Have you ever needed to give an unpopular message?
- How do you promote compliance with codes of conduct and professional working?
- How do you take into account stakeholder requirements?
- When have you needed to supplement your knowledge seeking expert advice?
- Do you know the limits of your delegated responsibilities?

E Competencies – professional development

E1. Demonstrate continuing professional development

You will need to demonstrate that you are recording your continued learning and professional development. You will need to give examples of self-directed research (e.g. journals, magazines, legislative documents.....), training courses (e.g. H&S, presentation / report writing skills, new technology / software.....), conferences, and technical panel meetings, seminars, publishing papers and giving presentations. *You will be aware of the need of Corporate*

members, to maintain at least 30 hours of CPD per year and keeping a record of this in the CIWEM template, illustrating how the learning is contributing to your ability to perform as a professional.

- Do you have a personal development plan?
- Do you coach, counsel or mentor others?

E2. Discuss your commitment to CIWEM

You will need to identify your commitment to CIWEM, identifying your reasons for joining the Institution, how you have, will continue to or will in future contribute to developing the Institution (e.g. Branch meetings, journal papers, WEM articles, Special Interest Groups, Technical Panels, networks etc....).

- Why did you choose CIWEM?
- What have or will you contribute to CIWEM?
- How do you promote the benefits of CIWEM with your colleagues and other potential members?

Hints on how to structure your examples to demonstrate attainment of the mandatory competencies (MCs).

When providing examples to demonstrate your attainment of the MCs you may find it helpful to structure your response on the lines of the **STAR** model:

- **Situation** - setting the scene.
What was the problem/situation/project brief?
What were the main issues involved with the situation/problem/project?
What did you need to achieve/what were the goals?
- **Task**
What did you need to do?
What was your role?
- **Action**
What were the steps you took to complete the task?
What challenges did you overcome?
- **Results**
What was the outcome?
Did you deliver your responsibility?
What lessons did you learn?