Welcome - starting at 8.30

CIWEM Chartered Institution of Water and Environmental Management

Chartership competencies Part 6| Breakfast Webinar Series

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Introduction and Format

- Introduce competency
- Set out Key Questions
- Give some example responses
- Set some activities for today
- Set some activities for this week
- Cross referencing for other accreditations

B4 – unpacked

- B1 - Ability to **analyse** and **evaluate** environmental and/or water problems
- B2 - Ability to solve problems by **identifying**, **developing** and **evaluating** options
- B3 - Ability to **initiate**, **implement** and **manage** change
- B4 - Ability to **plan** and **implement** solutions and **monitor** their continuing performance

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.

B4 – Key Questions

- 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?

B4 – Examples

- **Example 1**
- In a new and growing office, it is necessary to continually implement and monitor systems from production of government tenders down to the composting policy of the office. (Issue)
- With my team, I closely monitor the progress of my own and the office projects and management systems through regular meetings with team members. (Monitor, implementation)
- One of my major roles has been to develop a resourcing planning system for the office. Initially, as the only technical member of staff, a simple diary log was sufficient. The complexity of workload planning and the importance of good resourcing has become more important as the office grows. I have therefore implemented a new planning system which draws from project profiles and staff timesheets. (Implement, continuing operation)

B4 – Examples

- **Example 2**
- As part of a current Flood Risk Mapping project only level gauge data are available. (Issue)
- In an attempt to validate a rating from the hydraulic model, I have organised the provision of flow gauging equipment and am monitoring the level on a daily basis, with the aim of obtaining spot gaugings if higher flows are recorded. (Monitoring)
- Before this data can be incorporated into the study I will be required to assess the performance and validity of this data, to ensure that it is of good quality by making comparisons between the modelled and observed flow/levels. (Validation, audit, resolve unsatisfactory performance)
- Throughout the study I will monitor the gauge and any outputs that could be of use to the Environment Agency will be provided at the end of the study.

B4 – Examples

- **Example 3**
- I designed and verified new Pressure Managed Areas (PMAs) to reduce the pressure in sections of their network and therefore leakage. (Issue)
- This reduces the requirement to take more water from the environment and the use of energy and chemicals to treat it. Also calmed the distribution network and was a cost-beneficial way to extend the life of assets. (Information – environmental side of a water issue)
- I completed a targeted review of the high pressure areas in the network, selected suitable DMAs with good leakage savings. (Audit)
- I sized the appropriate new assets and produced construction schematics. I assisted through the commissioning process and improved pressure and flow information (that was later used to calculate actual savings). (Post project appraisal)
- After solution implementation, burst rates and supply interruptions decreased and the target leakage saving of 1 Ml/day was achieved.(Result, achievement)

B4 – Examples

- **Example 4**
- I worked with the Environmental Team at [WATER COMPANY] liaising with farmers to encourage sustainable farming practices within the River Cuckmere catchment which protected water quality within the river and associated raw water storage reservoir. (Issue)
- Developing an abstraction management strategy was business critical to ensure metaldehyde, a difficult to treat pesticide, which although posing no danger to health or the environment, must not enter the reservoir at concentrations which breached EU drinking water standards. (Information, background)
- Working to reduce farmers use of metaldehyde by using alternative ferric phosphate and reducing soil erosion, for example through grass buffer strips, mitigated the potential for pesticides adsorbed on soil particles to runoff the fields to the water courses. (Implement)

B4 – Examples

- **Example 4 - continued**
- In addition, I promoted further mitigation by producing an operating procedure for river abstraction to the reservoir. This monitored river flows, turbidity, metaldehyde and reservoir storage to ensure that abstraction avoided the first flush of metaldehyde through the system at the end of summer / start of autumn. (Monitor)
- During the second year of implementing my management strategy I worked with water quality to reduce the turnaround time for metaldheyde results from 4 days to 24 hours. This supported real time performance monitoring of the solution and stakeholder feedback on the positive reductions in metaldehyde resulting from catchment management and so ensure ongoing application of the strategy. (Improvement, “corrective” action, result)

Activity – Today

- Discuss with your peers (or on the forum once set up):
  - Types of r**esearch/investigation** that you have carried out
  - Methods of **evaluating options** you have used
  - What **successful** outcomes have you had
  - **Lessons** have you learnt from unsuccessful problems

Activity – this week

- Spend 15 mins answering the key questions for this week
- Look at todays examples – take three highlighters and mark-up each example with where you can see evidence of plan, implementing and monitoring solutions.
- Prepare 5 bullet points for projects you have worked on in your career. Consider how your ability to **plan** and **implement** solutions. How was the continuing performance **monitored**?
- Now mark-up your evidence with the same three colours. Have you covered all three aspects of this competency?

Cross referencing – other accreditations

Related professional registrations

- While looking at B4 you may want to consider incorporating the following related professional regulations for Chartered Env/Eng/Sci.
- (CEng, B3) - Implement design solutions, and evaluate their effectiveness.
- (CEng, C1) - Plan for effective project implementation.
- (CSci, A2) - Use theoretical and practical methods in the analysis and solution of problems.
- (CSci, B1) - Plan and organise projects effectively.
- (CSci, B3) - Use effective influencing and negotiating skills.
- (CEnv, A3) - Analyse and evaluate problems from an environmental perspective, develop practical sustainable solutions and anticipate environmental trends to develop practical solutions.

Tips

- Continually work on your submission – Slow, steady and consistent.
- Set a (realistic) date for submission – there are 6 application deadlines a year.
- Look for opportunities. Look for how you can diversify.
- Track your CPD continually –
  - You will forget. You will spend hours trying to remember/find 3 or so years of CPD
  - Spend 5 mins making a few notes after or even before learning.
  - Save flyers, calendar entries.
- Accountability (Mentor)
- Interview – keep it in mind

News

- Fast Track to Membership course – now available online (£325+VAT Group discount available).
- The course has been tailored to compliment this free webinar series to and aid in your submissions.
- A two-hour module. Part 1, assisting you with the preparation of your Career Overview Report and taking you through the application process. Part 2, one-hour preparing for your Professional Review Interview.
- A three-hour session delivered in two parts with one a highly experienced tutors who will work with you in groups of two or three fellow applicants to prepare the core content of each of your 14 competencies
- 1 hour 1 on 1 tuition support to review your submissions from professional tutors, many of which are also Professional Review Interviewers.

- Contact learning@ciwem.org or visit https://www.ciwem.org/training/fast-track-to-chartership

Save the date

Next call

3rd June – C1

Ability to manage resources effectively and efficiently

CIWEM Chartered Institution of Water and Environmental Management

Chartership competencies Part 7 | Breakfast Webinar Series

Please fill in the Survey – if helps improve the series

Please book 24 hours before the next session

Jack Southon