



Water Mist Installer Competency Scheme

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Water Mist – 30 Years of Development

- 30 years of experience in marine and land applications
- EN 14972 Series of standards for design, installation and fire test protocols
- EN 17450 Series of component testing standards.
- Third-party product/system certification VdS, FM and other certification bodies
- Water mist is now a mature fire-protection technology

Water Mist Competency Scheme

What is it and why is it needed?

The installer competency scheme covers **conformity assessment** the whole process end to end.

- Design
- Installation
- Commissioning
- Verification
- Maintenance



Note: Currently proposed not to be modular

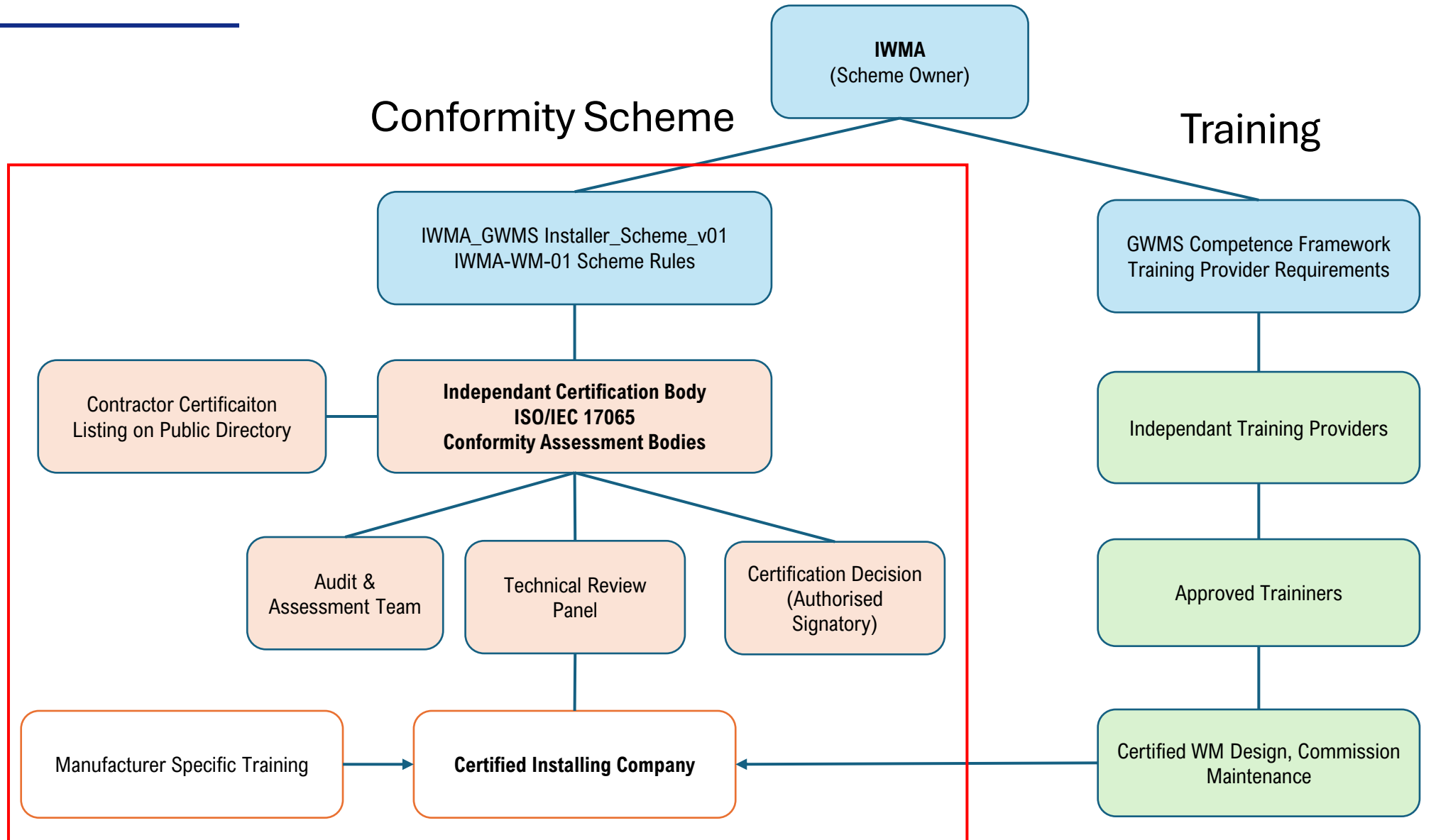
The Basis of the Scheme

- EN 14972 - European series for fixed land-based water mist fire suppression systems.
- ISO 17065 Conformity assessment — Requirements for bodies certifying products, processes and services
- In the UK these are audited by UKAS (the United Kingdom Accreditation Service)
- In Germany DAkks (Deutsche Akkreditierungsstelle)



Scheme Structure

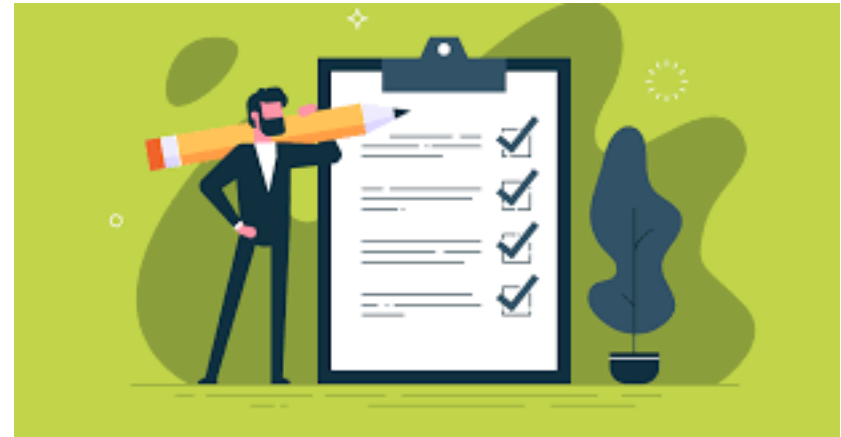
ISO 17065 National
Accreditation Body



Conformity Assessment Body Responsibilities

CAB can be the IWMA or another accredited body

1. Application review
2. Audit and evaluation activities
3. Technical review
4. Certification decisions
5. Surveillance audits
6. Suspension, reduction or withdrawal of certification
7. Management of the public directory of certificated organisations



What exactly does a company have to do to become certified?

1. Apply
2. Demonstrate trained/competent personnel
3. Design audit
4. Installation/site audit
5. Management-system audit
6. Independent technical review
7. Certification decision
8. Public listing
9. Ongoing surveillance



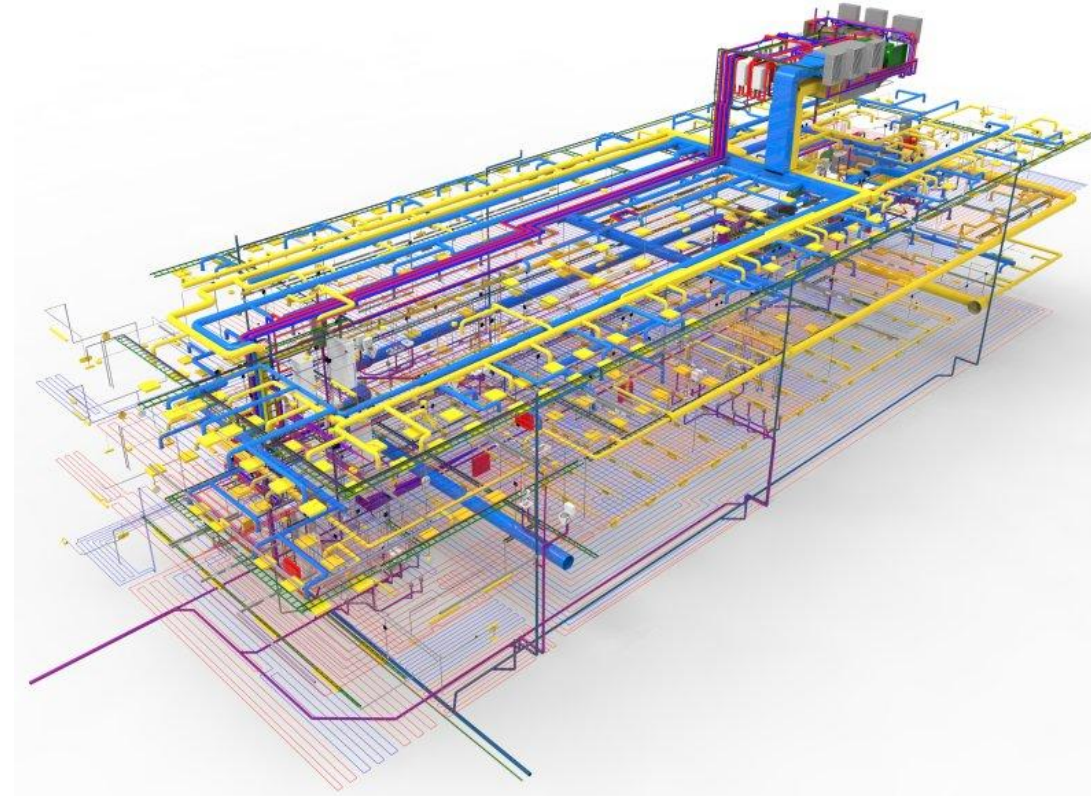
Extent of Audit and Frequency

Audit Frequency.

- Twice per year
- Audits may be reduced to once a year at the discretion of the certification body after a long period of successful audit.
- More frequently on request

Audit - Design

- Review of Quote and Tender Specification
- Compliance with EN 14972
- Hazard Classification
- Nozzle Selection
- Compliance with DIOM
- Drawing Review
- Review of Hydraulic Calculations and Water Supply Calculations
- Design Stage Variations



Audit – Commissioning and Handover

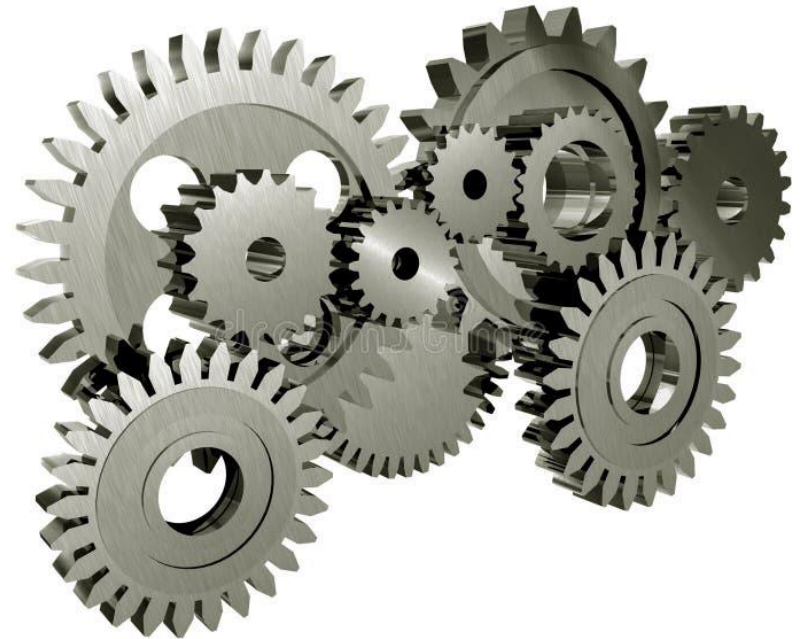
- Review record drawings
- Pipework pressure tests
- System monitoring test and inspection records
- Pre-action/deluge valve commissioning records
- Water supply test and inspection records
- Fire alarm cause & effect test records (where applicable)
- Completion certification and variations
- Operation & maintenance manuals
- Client training records



Audit - Management Systems

The management system shall include, as a minimum:

- Document control procedures
- Control of records
- Corrective and preventive action processes
- Complaints handling procedure
- Internal audit programme
- Management review process
- Defined organisational structure
- Competence management process
- Control of subcontractors
- Calibration and control of measuring equipment
- Control of applicable standards and manufacturer documentation



Audit – Installation

Review of the physical site with the drawings.

Spot check of the following items.

- Extent of coverage
- Nozzle positions
- Pipework and bracketry visual inspection
- Water supply inspection
- Where permitted, check
 - Operate Valves
 - End of Line Tests
 - Run Pumps to Confirm the Flow and Pressure
 - Monitoring and Alarms

Note: Installation audit may be undertaken physically or, where appropriate, through controlled remote video inspection.



Audit – Maintenance

Review of previous maintenance records for the site.

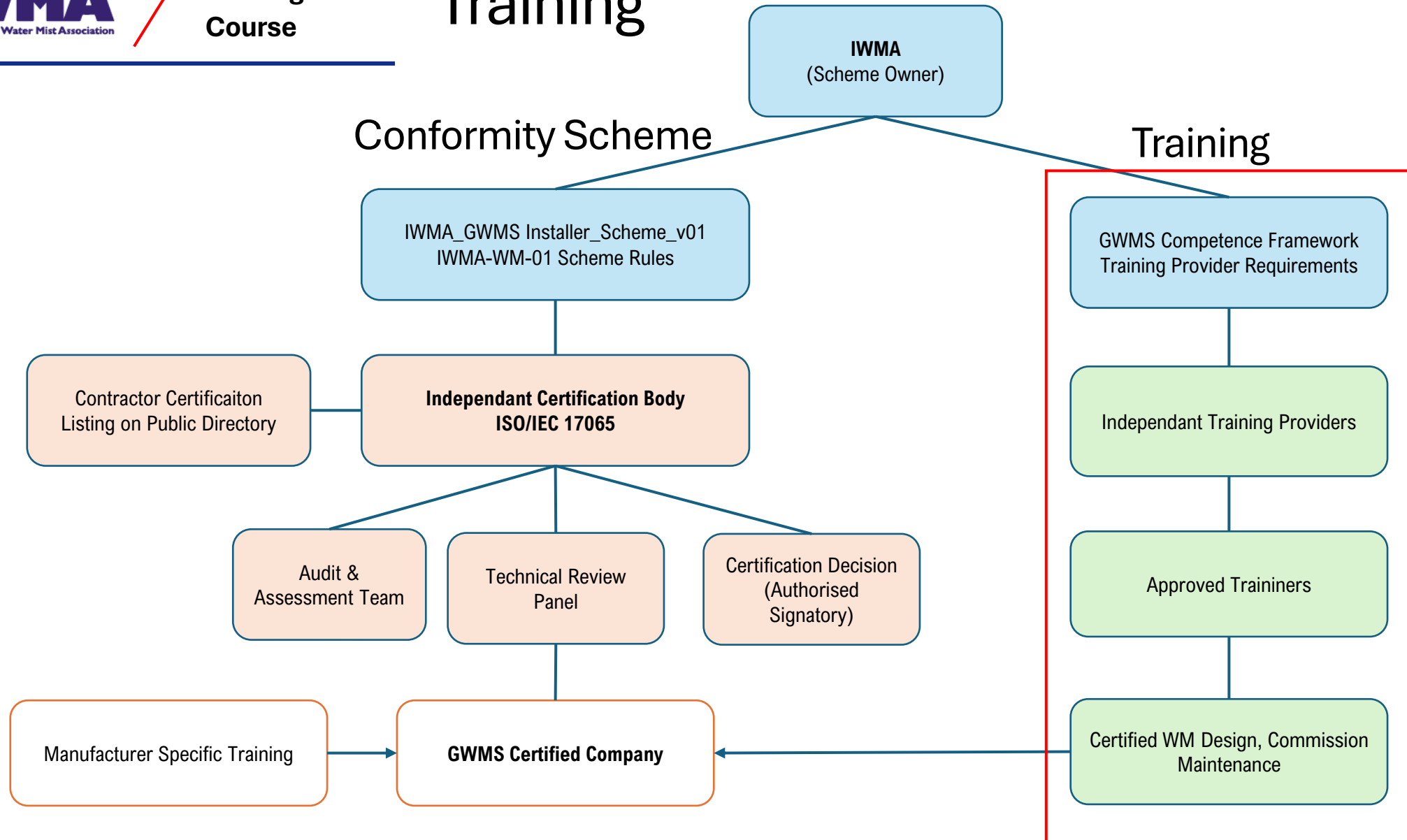
Review of remedial works proposals.

Review of the physical site with the drawings (if available). Witness checking of

- Extent of Coverage
- Nozzle Positions
- Pipework Visual Inspection
- Water Supply Inspection. Tanks, Pumps, Cylinders
- Check.
 - Operate Valves
 - End of line tests
 - Run pumps to confirm the flow and pressure
 - Monitoring and alarm check



Training



Why we need training independent of Manufacturer training

- Demonstration of Competence – Creating a recognised benchmark.
- Builds confidence with authorities and clients.
- Not all manufacturer training is equal.
- Improves system reliability and safety.
- Promotes consistency across the industry.
- Supports compliance with standards and regulations.
- Supports global growth of water mist technology – making the training available to specifiers.
- Strengthens the reputation of the industry



Why an E learning platform?

- Global accessibility in multiple languages. 24/7 availability
- Greater accessibility for different learning styles and speeds
- Consistent training delivery
- Easy to update and maintain
- Reduced travel and accommodation costs - Environmentally friendly
- Less downtime for employees and employers.
- Cost effective and Scalable training solution.
- Improved learner retention

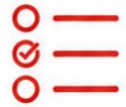


Training Structure – EN 14972-1

- 01** EN14972 Standards, Fire Test Protocols and the Design, Installation, Operation and Maintenance Manual (DIOM)
- 02** Design of Automatic Water Mist Systems
- 03** Design of Deluge Nozzle Systems
- 04** Hydraulic Calculations Overview
- 05** Water Supplies
- 06** Installation
- 07** System Monitoring & Electrical Requirements
- 08** Diesel Engine Driven Pumpsets
- 09** Commissioning
- 10** Inspection & Maintenance
- 11** Hydraulic Calculations

Questions can be submitted at anytime during the training via the messaging service

Tests and Assessments



Multiple Choice Questions



True / False Questions



Fill in the Blank



Matching Questions



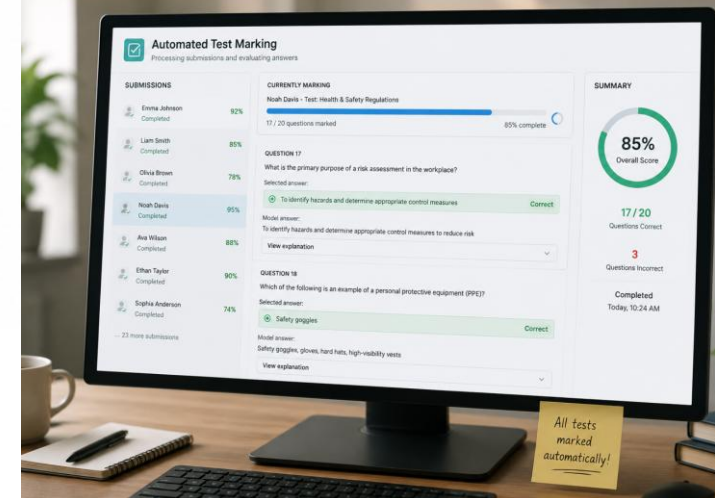
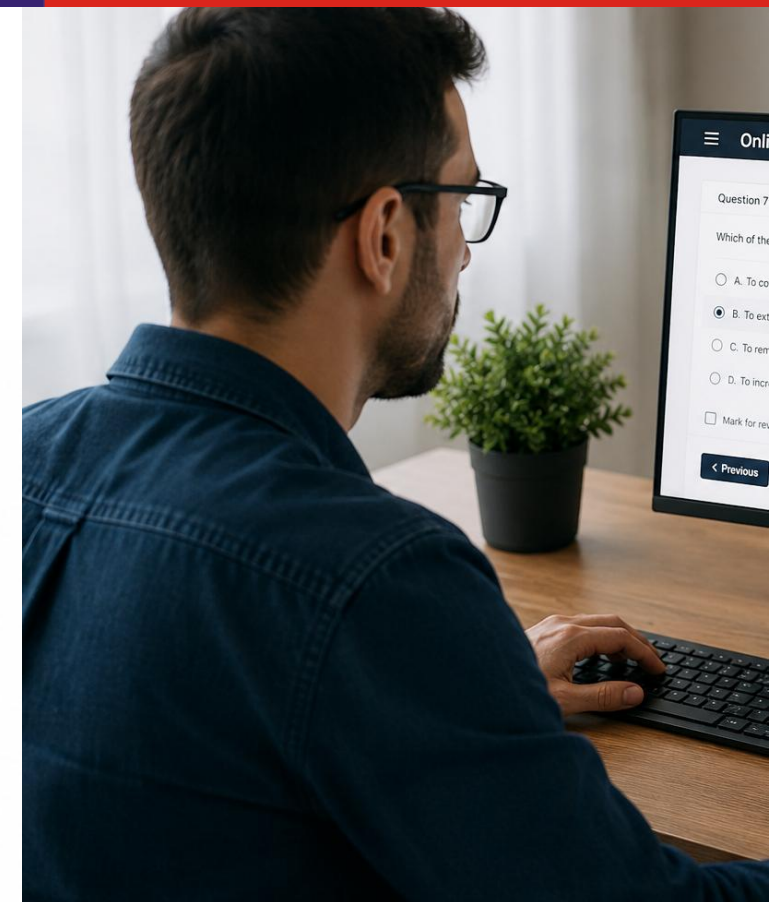
Descriptive / Essay Questions



Practical Knowledge Assessments - Via uploaded documents, photos, or descriptive responses



Timed Exams



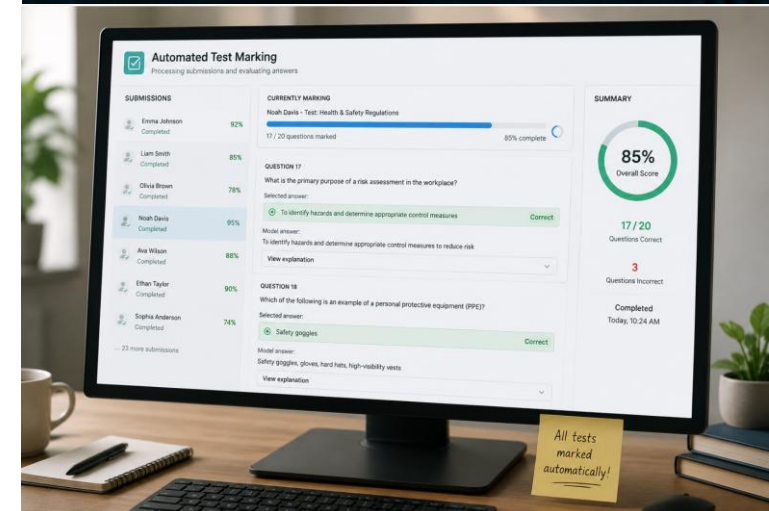
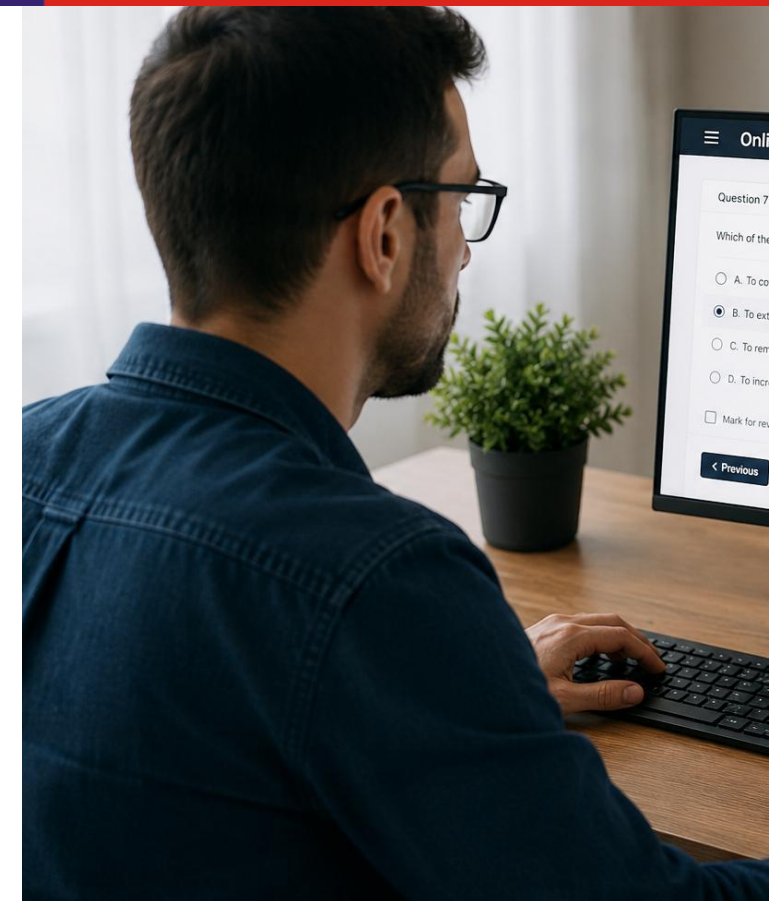
Costs & Times Scales

Timescales

- Competency Scheme - within 12 months
- EN 14972-1 Training Course - Within 3 months

Costs

- Costs for training and certification will be comparable with other industry scheme.
- Operated by the IWMA on a not for profit basis



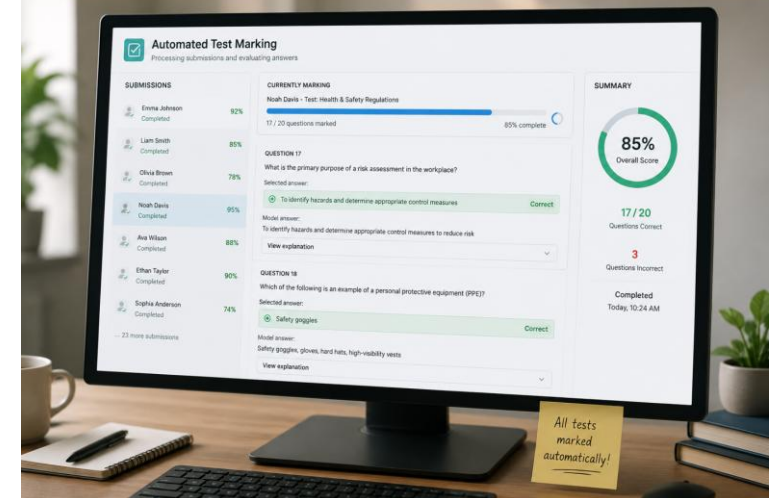
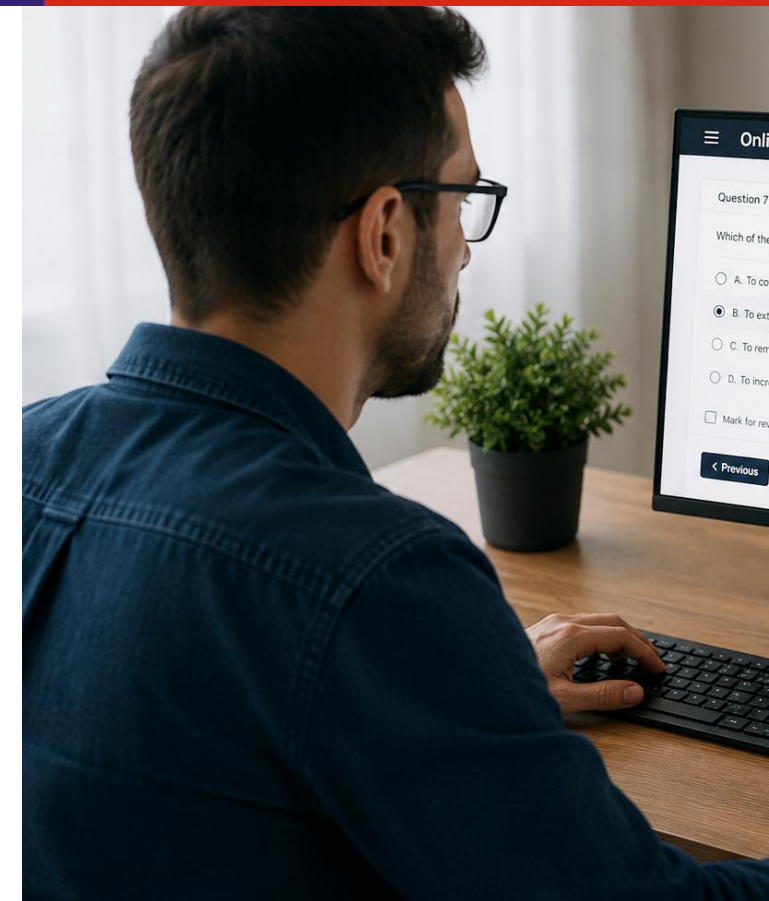
Why does this matter?

Today

Reliant on Manufacturer training → varying standards → no common industry benchmark → difficult for specifiers/AHJs/clients to establish installer competence.

Proposed

Common IWMA competence framework → independent assessment international → recognised certification → public register → ongoing surveillance.





Questions