Institute of Explosives Engineers

VOICE OF THE EXPLOSIVES INDUSTRIES

INSTITUTE OF EXPLOSIVES ENGINEERS
ACCREDITED TRAINING CENTRES

TRAINING QUALITY SPECIFICATION (TQS)

INSTITUTE OF EXPLOSIVES ENGINEERS
TRAINING CENTRE QUALITY SPECIFICATION (TQS)

SETTING QUALITY SPECIFICATION

The Institute of Explosives Engineers (IExpE) is the explosives industry professional body responsible for setting and upholding competence standards in explosives training and practice.

The Health and Safety Executive's Explosives Inspectorate defines competence as the combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely and recognises that factors such as attitude and physical ability and behaviours can also affect someone's competence.

The IExpE competence model acknowledges that competence is not static; it evolves over time and should be actively maintained. The model outlines the pathway from initial qualification through to ongoing professional development and revalidation.

ACCREDITATION

The Institute provides accreditation for training centres, offering formal recognition that a training centre meets specific quality specification set by IExpE.

Accreditation signifies that a training centre possesses the technical and organisational competence required to design, deliver, and manage courses in line with IExpE's quality specification.

This specification is designed to ensure compliance with both training and explosives regulations and, to achieve the best possible training outcomes.

When IExpE accredits a training centre, it declares the following:

> "The Institute of Explosives Engineers accredits that this centre possesses the technical and organisational competence to design, deliver, and manage courses in full compliance with IExpE's quality specifications."

APPLICABLE LAWS, REGULATIONS AND GUIDANCE

Though based in the UK, IExpE serves a global market. Many accredited training centres operate in jurisdictions outside the UK, and UK-based training centres often train students working internationally.

Given this global scope, the specifications outlined here refer to applicable regulations, which may vary by country. It is the responsibility of each Accredited Training Centre to ensure compliance with the relevant local laws and regulations in their respective jurisdictions.

NON-PROSCRIPTIVE NATURE OF THIS SPECIFICATION

This specification has been designed to be non-proscriptive, meaning it focuses on the outcomes and objectives that should be achieved rather than dictating specific methods, tools, or processes to be followed.

Accredited Training Centres have the flexibility to determine how best to meet these specifications, based on their unique circumstances, expertise, and resources. This approach encourages innovation, adaptability, and the development of solutions that are both effective and practical for the diverse environments in which Accredited Training Centres operate.

By setting clear goals and expectations while allowing for tailored implementation, IExpE supports Accredited Training Centres in achieving excellence without imposing unnecessary restrictions or one-size-fits-all requirements.

THE COMPETENCE FRAMEWORK (CF)

The Competence Framework (CF) is the cornerstone for defining, measuring, and managing competence throughout an individual's professional lifecycle. Developed by the Institute of Explosives Engineers (IExpE), it ensures that competence is maintained at a high standard, aligned with regulatory requirements and operational expectations.

Principles of Competence
Competence is the nexus of training, skills, experience, and knowledge (TSEK) required to perform tasks safely. The IExpE competence model extends this by acknowledging that:

Competence evolves over time and must be actively maintained.

Factors such as attitude, behaviours, and physical ability significantly influence performance.

This model focuses on four key principles:

Knowledge, Skills, and Experience Integration. Competence builds on theoretical knowledge, practical skills, and applied experience. These elements are systematically developed through structured qualifications and continuous professional development (CPD).

Lifecycle Approach to Competence. Competence is nurtured from initial training through to revalidation and career progression. Regular assessments and updates ensure that standards are maintained.

Alignment with Industry Standards. Ensures adherence to regulatory and operational benchmarks. Promotes confidence in qualifications among employers, learners, and regulators.

Governance and Accountability. Provides clear frameworks for auditing, tracking, and validating competence. Supports transparency for all stakeholders.

Maintaining Competence
Competence is not static; it must be actively maintained through:

Formal Training: Structured courses aimed at specific objectives.

Informal Training: Experiential learning and self-directed study.

Continuous Professional Development: Regular activities to refine skills and knowledge.

Revalidation: Periodic assessments to ensure current competence.

This structured approach mitigates competence fade and reinforces operational safety and effectiveness.

COMPETENCE PILLARS OVER TIME

The diagram below describes the key pillars of competence and their evolution over time.

MONTH	KNOWLEDGE	SKILLS	EXPERIENCE	TRAINING ACTIVITY	NOTES	OUTCOME	PHASE
1				**Formal Training** Initial Qualification	E.g. Bomb Disposal Officer's Course - IMAS Level 3	Training Performance Standard **(TPS).**	WORK-UP TRAINING
2				**Formal Training** Induction	E.g. Induction to a UXO company.	Learn the context of the organisation.	WORK-UP TRAINING
3				**Formal Training** On-The-Job Training **(OJT)**	Training to meet OPS, including new equipment (e.g., locators) and completing paperwork	Operational Performance Standard **(OPS).**	WORK-UP TRAINING
4				**Informal Training** Working	Knowledge, skills, and experience evolve with active use and diminish when neglected	Dynamic Variation **(DV)**: Building experience; unused knowledge atrophies.	MAINTENANCE
5				**Formal Training** Continuous Professional Development **(CPD)**	CPD activities to consolidate knowledge and skills	**Consolidation** – competence baseline maintained.	MAINTENANCE
6				**Informal Training** Working	Building experience while unused knowledge atrophies	Dynamic Variation **(DV)**: Building experience; unused knowledge atrophies.	MAINTENANCE
7				**Formal Training** Continuous Professional Development **(CPD)**	CPD activities to consolidate knowledge and skills	**Consolidation** – competence baseline maintained.	MAINTENANCE

DEFINITIONS

Assessment
A structured process to evaluate a learner's competence, skills, and knowledge against predefined standards or learning objectives, ensuring they meet the required performance criteria.

Attitude
Inclination of mind and behaviours towards things, persons and situations acquired through experience and training.

Audit
A systematic and independent review conducted to verify compliance with training standards, documentation requirements, and performance benchmarks.

Behaviours
The actions and conduct displayed in performing tasks or interacting with others, reflecting attitudes, values, and professional standards. This encompasses both individual responsibility and collaborative practices essential for achieving desired outcomes.

Competence Fade
The gradual reduction of a person's ability to perform a task or role effectively due to a lack of ongoing practice, exposure, or engagement with the necessary knowledge, skills, and attitudes. This emphasizes the importance of regular updates through training, CPD (Continuing Professional Development), and revalidation.

Consolidation
The process of maintaining a competence baseline through targeted activities, ensuring that knowledge and skills remain aligned with operational requirements.

Continuous Professional Development (CPD)
Structured activities that enable professionals to consolidate knowledge, refine skills, and maintain competence over time.

Currency Interval
The maximum time allowed between practical use of a skill or knowledge to prevent skill fade and ensure ongoing proficiency.

Dynamic Variation (DV)
The natural process of building experience through active engagement while recognising that unused knowledge and skills will atrophy over time.

Experience
The practical application of knowledge and skills in real-world scenarios. This includes active participation in tasks, exposure to challenges, and the development of judgment and decision-making abilities that reinforce competence and operational effectiveness.

Formal Training
Training that is structured around specific learning objectives, is documented, and includes supervised assessment of students upon completion.

Informal Training
Training that occurs outside of a formal, structured environment, typically gained through experience or self-directed learning.

Knowledge
The theoretical understanding required to perform tasks effectively. This includes facts, information, principles or understanding acquired through experience, research or education and concepts that underpin the technical and professional aspects of the role.

Learning Objective
The competences to be acquired through training.

On-The-Job Training (OJT)
Practical training conducted in a workplace setting, designed to align the learner's skills and behaviours with operational standards and requirements.

Operational Performance Standard (OPS)
The standard of competence expected in real-world, operational environments, often verified through on-the-job training and practical assessments.

Revalidation
The periodic process of reassessing and confirming an individual's competence to ensure continued alignment with operational and industry standards.

Skill Fade
The degradation of technical or practical skills over time due to insufficient practice or exposure, emphasising the need for regular skill reinforcement.

Skills
The practical ability to perform tasks and apply knowledge effectively in real-world scenarios. This encompasses both technical skills, behaviours, and interpersonal capabilities necessary for achieving desired outcomes.

Training
A distinct set of teaching and learning activities designed to attain defined learning objectives.

Training Needs Analysis
The process of identifying the competences necessary to meet a performance standard and the training required to attain these competences.

Training Performance Standard (TPS)
A defined benchmark that measures the outcomes of formal training activities, ensuring learners have met the required learning objectives.

Validation
The process of confirming that a training programme meets its intended objectives and produces the desired learning outcomes, often involving reviews, audits, and evaluations.

Validity Interval
The maximum period a qualification remains valid before re-validation training is required to ensure continued competence.

SPECIFICATION NUMBERS AND TITLES

SUBJECT	CATEGORY	SUBCATEGORY
1. ELIGIBILITY CRITERIA		
	1.1 Membership of the Institute of Explosives Engineers **1.2 Centre Managed by an Accredited Training Manager** **1.3 Insurance Coverage**	
2. DECLARATION OF COMPLIANCE		
3. EXPLOSIVES GOVERNANCE SPECIFICATIONS	**3.1 Safe Use of Explosives in Training**	3.1.1 Storage of Explosives 3.1.1.1 Compliance with License 3.1.1.2 Security and Safety of Explosives 3.1.1.3 Competence of Staff 3.1.2 Safety Management System 3.1.2.1 Risk Assessment and Emergency Response Plan 3.1.2.2 Major Accident Policy (if applicable) 3.1.2.3 Competence of Staff in Safety 3.1.2.4 Safety Drills 3.1.3 Incident Reporting 3.1.3.1 Compliant Process 3.1.3.2 Incident Investigation 3.1.4 Personal Protective Equipment 3.1.5 Range Procedures 3.1.5.1 Compliant Process 3.1.5.2 Competence of Staff
	3.2 Safe Transport of Explosives for Training	3.2.1 Explosives Transport Procedures 3.2.1.1 Compliant Vehicles 3.2.1.2 Compliant Process 3.2.1.3 Qualified Lead Person 3.2.1.4 Compliant Records 3.2.2 Packaging and Labelling Compliance 3.2.2.1 Compliant Procedure 3.2.2.2 Compliant Documents 3.2.3 Route and Security Planning 3.2.3.1 Compliant Process 3.2.3.2 Risk Assessment
	3.3 Explosives Training Environment	3.3.1 Planning and Zoning Compliance 3.3.1.1 Compliant Land Use 3.3.1.2 Records 3.3.2 Public Safety Measures 3.3.2.1 Risk Assessment 3.3.2.2 Risk Control Measures 3.3.3 Noise Control and Environmental Impact

		3.3.3.1 Noise Control Measures
		3.3.3.2 Pollution Control Plan
		3.3.3.3 Waste Disposal
		3.3.3.4 Records
4. TRAINING GOVERNANCE SPECIFICATIONS	**4.1 Impartiality**	4.1.1 Objective Standard
		4.1.2 Impartial Checks
		4.1.3 Equality
	4.2 Accessibility Specifications and Learning Support	4.2.1 Learning Difficulties and Disabilities
		4.2.2 Provision of Reasonable Adjustments
	4.3 Essential Governance Policies	
5. INFRASTRUCTURE SPECIFICATIONS	**5.1 Buildings**	5.1.1 Safe
		5.1.2 Suitable
		5.1.3 Maintained
	5.2 Equipment	5.2.1 Calibration and Servicing
		5.2.2 Hazardous Substances Assessments
		5.2.3 Tracking and Records
	5.3 Transport	5.3.1 Legal and Safe
		5.3.2 Effective
	5.4 Accommodation	5.4.1 Safe
		5.4.2 Maintained
		5.4.3 Suitable
	5.5 IT Infrastructure	5.5.1 Sufficient
		5.5.2 Security
		5.5.3 Technical Support
	5.6 Documentation and Record-Keeping Specifications	5.6.1 Training Materials
		5.6.2 Learner Records
		5.6.3 Assessment Documentation
		5.6.4 Annual Review and Reporting
	5.7 Confidentiality and Data Protection	5.7.1 Secure
		5.7.2 Private
	5.8 Logistics	5.8.1 Programming
		5.8.2 Joining Instructions
		5.8.3 Follow-Up
6. COMPETENCE SPECIFICATIONS	**6.1 Maintaining Competence**	6.1.1 Formal Training
		6.1.2 Informal Training
		6.1.3 Continuous Professional Development (CPD)
		6.1.4 Revalidation
	6.2 Managing Competence Fade	6.2.1 Regular Practice
		6.2.2 Scheduled CPD Activities
		6.2.3 Follow-Up Intervals
	6.3 Competency Record-Keeping	
7. TRAINING SPECIFICATIONS	**7.1 Training Design**	7.1.1 Training Needs Analysis (TNA)
		7.1.2 Regulatory Compliance Requirement Statement.
		7.1.3 Training Performance Standard (TPS).

		7.1.4 Operational Performance Standard (OPS).	
		7.1.5 Continuation Training.	
		7.1.6 Currency	
		7.1.7 Validity.	
		7.1.8 Target Audience.	
		7.1.8.1 Sector	
		7.1.8.2 Skill level	
		7.1.8.3 Language proficiency	
		7.1.8.4 Prior knowledge requirements.	
		7.1.9 Logistics. The logistics for the course including:	
		7.1.9.1 Course Duration	
		7.1.9.2 Course Location	
		7.1.9.3 Course Cost	
		7.1.9.4 Course Accommodation	
		7.1.9.5 Course Timetable	
		7.1.10 Training Content.	
		7.1.11 Instructional Strategies.	
		7.1.12 Resources and Media.	
		7.1.13 Duration and Structure.	
		7.1.14 Assessment Strategy.	
		7.1.15 Validation and Evaluation.	
		7.1.16 Currency Interval	
		7.1.17 Validity Interval.	
	7.2 Training Documentation and Control	7.2.1 Documentation Control.	
		7.2.2 Accessibility and Security.	
	7.3 Registered Courses	7.3.1 Registering Courses with IExpE	
		7.3.3.1 Course Prospectus.	
		7.3.3.2 Course Naming.	
		7.3.3.3 Placing on the Register.	
		7.3.2 Maintaining Registered Course Details.	
	7.4 Training Delivery	7.4.1 Competent Staff.	
		7.4.2 Safety and Compliance	
		7.4.3 Training Delivery Materials.	
8. ASSESSMENT SPECIFICATIONS	**8.1 Assessment of Learners**	8.1.1 Assessment Against Training Outcome Statement	
		8.1.2 Objective	
		8.1.3 Investigation	
	8.2 Examination Bank Development and Maintenance		
	8.3 Exam Content and Quality Control		
	8.4 Security of Examination Bank and Environment	8.4.1 Controlled Access	
		8.4.2 Examination Room Standards	
		8.4.3 Invigilation Protocols	

	8.5 Notification of Training Outcome	8.5.1 Registered Course Number 8.5.2 Learner Details.
	8.6 Certification	
	8.7 Complaints and Appeals	
9. QUALITY SPECIFICATIONS	**9.1 Training Validation**	9.1.1 Feedback 9.1.2 Review 9.1.3 Monitor 9.1.4 Records 9.1.5 Follow-
	9.2 Training Evaluation	9.2.1 Gather Data 9.2.2 Data Analysis 9.2.3 Implement Improvements
	9.3 Internal Audit	9.3.1 Audit Schedule 9.3.2 Scope of Audits 9.3.3 Audit Criteria and Documentation 9.3.4 Non-Conformity and Corrective Actions 9.3.5 Audit Records and Reporting 9.3.6 Continuous Improvement
	9.4 External Audit Scope and Schedule	9.4.1 Initial Full-Scope Audit 9.4.2 Biennial Full-Scope Audit 9.4.3 Interim Targeted Audits
	9.5 Risk-Based Audits	9.5.1 High-Risk Activities 9.5.2 Risk Assessment Review
	9.6 Annual Reporting Requirements	9.6.1 Course Delivery Statistics 9.6.2 Learner Feedback Summaries 9.6.3 Policy and Documentation Updates
	9.7 Audit Reporting and Follow-Up	9.7.1 Strengths and Improvement Areas 9.7.2 Corrective Actions 9.7.3 Recommendations
	9.8 Stakeholder Engagement in Feedback and Improvement	9.8.1 Learners and Instructors 9.8.2 Regulatory Bodies 9.8.3 Continuous Improvement Team
A. GENERAL SPECIFICATIONS FOR SATELLITE CENTRES	**A.1 Affiliation And Guidance**	
	A.2 Compliance with IExpE Specifications	
	A.3 Declaration of Compliance	
	A.4 Operational Specifications	
		A.4.1 Training Scope
		A.4.2 Documentation
		A.4.3 Insurance Cover
B. FRANCHISE SATELLITE	**B.1 Branding and Materials**	

SPECIFICATIONS		
	B.2 Certification Process	
	B.3 Annual Fee Structure	
	B.4 Audit and Quality Assurance	
C. INDEPENDENT SATELLITE SPECIFICATIONS	C.1 Autonomy and Branding	
	C..2 Training Delivery	
	C.3 Certification Process	
	C.4 Annual Fee Structure	
	C.5 Audit and Quality Assurance	
D. ADDITIONAL RESPONSIBILITIES OF PARENT ATCS	D.1 Guidance of Satellites	
	D.2 Data Reporting	
	D.3 Training and Development	
	D.4 Dispute Resolution	

1.   ELIGIBILITY CRITERIA

The Institute of Explosives Engineers (IExpE) should ensure that all Accredited Training Centres demonstrate a commitment to explosives and training competence by meeting the following requirements:

1.1   MEMBERSHIP OF THE INSTITUTE OF EXPLOSIVES ENGINEERS

The Accredited Training Centre should be a Company or Corporate member of IExpE.

1.2   CENTRE MANAGED BY AN ACCREDITED TRAINING MANAGER

The Accredited Training Centre should be managed by an Accredited Training Manager accredited by IExpE, responsible for overseeing compliance with standards and quality assurance.

1.3   INSURANCE COVERAGE

The Accredited Training Centre should maintain insurance coverage aligned with the scope and nature of training activities undertaken. For training involving use of live explosives, cover should specify this activity and have a coverage of up to £5M.

2.   DECLARATION OF COMPLIANCE

The Accredited Training Centre should formally declare the specific regulations applicable to their site, operations, and jurisdiction. This declaration of compliance should include all relevant local, national, and international regulations governing the use, handling, and storage of explosives.

The declaration of compliance serves as a foundational reference, enabling IExpE to assess the Accredited Training Centre's understanding of its regulatory obligations and to establish a basis for audit and inspection activities.

As an example this is a sample compliance declaration for a training site in Singapore:

Arms and Explosives Act (AEA): Regulates handling, storage, and licensing of explosives.

Explosives Rules: Specifies guidelines for the safe use of explosives.

Workplace Safety and Health (WASH) Act: Enforces safety standards in workplace practices involving explosives.

WASH (Explosive Powered Tools) Regulations: Mandates risk assessments, safety protocols, and personnel training for explosives use.

Licensing Requirements: Possession, storage, and operational use of explosives must be licensed by the Singapore Police Force's Licensing & Regulatory Department.

3. EXPLOSIVES GOVERNANCE SPECIFICATIONS

3.1 SAFE USE OF EXPLOSIVES IN TRAINING

The Accredited Training Centre should ensure the safe use of explosives in training by adhering to licensing requirements and relevant explosives regulations as applicable to accredited training activities.

3.1.1 Storage of explosives

The Accredited Training Centre should:

3.1.1.1 **Compliance with license.** Comply with storage limits, types, and handling protocols as defined in applicable regulations.

3.1.1.2 **Security and safety of explosives.** Implement secure storage, segregation, and proper signage to prevent unauthorised access and ensure safety.

3.1.1.3 **Competence of Staff.** Ensure that staff are knowledgeable and trained to apply relevant provisions in managing explosives storage.

3.1.2 Safety management system

The Accredited Training Centre should establish a safety management system that:

3.1.2.1 **Risk assessment and emergency response plan.** Includes documented hazard identification, risk assessments, and an emergency response plan as required by relevant regulations.

3.1.2.2 **Major Accident Policy (if applicable).** Incorporates a major accident prevention policy, if applicable.

3.1.2.3 **Competence of staff in safety.** Is understood by staff, who should demonstrate competence in explaining and applying safety procedures.

3.1.2.4 Safety drills. Conduct regular training and drills to ensure staff can respond effectively to incidents involving explosives.

3.1.3 Incident Reporting

The Accredited Training Centre should have a documented incident reporting procedure that:

3.1.3.1 Compliant process. Meets relevant regulatory standards for reporting incidents involving explosives.

3.1.3.2 Incident investigation. Includes processes for investigating incidents and implementing corrective actions, with recent investigations documented.

3.1.4 Personal protective equipment

The Accredited Training Centre should provide and enforce the use of appropriate personal protective equipment (PPE) as required by relevant regulations for handling explosives.

3.1.5 Range procedures

The Accredited Training Centre should ensure that range procedures:

3.1.5.1 Compliant process. Comply with licensing conditions and regulatory requirements for explosives use.

3.1.5.2 Competence of staff. Are followed consistently during training activities.

3.2. SAFE TRANSPORT OF EXPLOSIVES FOR TRAINING

3.2.1 Explosives transport procedures

The Accredited Training Centre should:

3.2.1.1   Compliant vehicles. Ensure vehicles used for transporting explosives are approved, marked, and documented as per relevant regulations.

3.2.1.2   Compliant process. Maintain complete transport documentation, emergency information, and effective emergency procedures.

3.2.1.3   Qualified lead person. Employ or have access to a qualified Dangerous Goods Safety Advisor (DGSA) to oversee dangerous goods transport, if applicable.

3.2.1.4   Compliant records. Maintain records, reports, and assessments completed by the DGSA, ensuring compliance with relevant regulations.

3.2.2 Packaging and labelling compliance

The Accredited Training Centre should:

3.2.2.1   Compliant procedure. Adhere to packaging and labelling standards for hazardous materials as required by relevant regulations.

3.2.2.2   Compliant documents. Document all compliance measures to ensure safe handling during transport.

3.2.3 Route and security planning

The Accredited Training Centre should:

3.2.3.1   Compliant process. Ensure route planning and security arrangements align with relevant guidelines for transporting explosives.

3.2.3.2   Risk assessment. Conduct risk assessments and implement measures to safeguard transport routes.

3.3.   EXPLOSIVES TRAINING ENVIRONMENT

3.3.1 Planning and zoning compliance

The Accredited Training Centre should:

3.3.1.1   **Compliant land use.** Verify compliance with local planning and zoning regulations concerning the storage and use of explosives on training premises.

3.3.1.2   **Records.** Document approvals and permits as required by local authorities.

3.3.2 Public safety measures

The Accredited Training Centre should implement public safety measures that:

3.3.2.1   **Risk assessment.** Consider proximity to populated areas or sensitive sites.

3.3.2.2   **Risk control measures.** Minimise risks to the public in accordance with local authority requirements.

3.3.3 Noise control and environmental impact

The Accredited Training Centre should:

3.3.3.1   **Noise control measures.** Implement noise control measures to minimise disturbance, especially near populated areas.

3.3.3.2   **Pollution control plan.** Addresses pollution control, hazardous waste management, and other environmental impacts associated with explosives.

3.3.3.3   **Waste disposal**. Ensure disposal of explosives waste and hazardous materials follows relevant regulatory requirements.

3.3.3.4   **Records.** Maintain records of waste disposal activities and associated documentation.

4.   TRAINING GOVERNANCE SPECIFICATIONS

4.1   IMPARTIALITY

The Accredited Training Centre should ensure impartiality in training governance and assessment by:

4.1.1   Objective standard. Making decisions based on objective evidence of conformity or non-conformity to quantifiable standards.

4.1.2   Impartial checks. Avoiding self-review and conflicts of interest in audit and assessment activities.

4.1.3   Equality. Maintaining operational control to ensure governance activities are conducted without bias or undue influence.

4.2   ACCESSIBILITY SPECIFICATIONS AND LEARNING SUPPORT

The Accredited Training Centre should ensure accessibility by:

4.2.1   Learning difficulties and disabilities. The Accredited Training Centre should ensure that its training programs, assessments, and support systems are accessible to all learners, including those with learning difficulties and disabilities, in compliance with relevant standards.

4.2.2   Provision of reasonable adjustments. The Accredited Training Centre should make reasonable adjustments in training delivery, assessment, and support services to facilitate an inclusive learning environment. Adjustments may include, but are not limited to, modified materials, additional support staff, assistive technology, and flexible timing for assessments.

4.3   ESSENTIAL GOVERNANCE POLICIES

The Accredited Training Centre should establish and maintain essential policies to support sound governance in training.

5. INFRASTRUCTURE SPECIFICATIONS

5.1 BUILDINGS

The Accredited Training Centre should ensure that buildings used for training are:

5.1.1 Safe. Comply with health, safety, and accessibility standards, including those related to fire safety, emergency exits, and structural integrity.

5.1.2 Suitable. Provide suitable learning environments, with adequate space, lighting, and ventilation to support effective training delivery.

5.1.3 Maintained. Are maintained to prevent hazards and ensure a safe, comfortable experience for all learners and staff.

5.2 EQUIPMENT

The Accredited Training Centre should ensure that all equipment used in training meets quality and safety standards through regular maintenance, inspection, and calibration as follows:

5.2.1 Calibration and servicing. Equipment should be calibrated and serviced regularly according to manufacturer recommendations and industry requirements to ensure reliability and safety, with all service dates documented.

5.2.2 Hazardous substances assessments. For equipment with chemical or hazardous materials, the Accredited Training Centre should conduct Hazardous Substances assessments to meet safety and regulatory standards.

5.2.3 Tracking and records. Maintenance records for all equipment should be maintained and include details on inspection dates, calibration records, and any corrective actions taken. These records should be accessible for audits.

5.3 TRANSPORT

The Accredited Training Centre should provide safe and compliant transport for training purposes by:

5.3.1 Legal and safe. Ensuring that vehicles used in training activities meet legal and safety standards, including regular inspections and maintenance.

5.3.2 Effective. Implementing protocols to ensure safe, timely transport for learners and staff as needed.

5.4   ACCOMMODATION

The Accredited Training Centre should ensure that accommodation facilities for training are:

5.4.1 Safe. Meet health, safety, and accessibility requirements to ensure a safe and comfortable environment for learners.

5.4.2 Maintained. Are maintained to high standards of cleanliness and safety, with necessary amenities for an optimal learning experience.

5.4.3 Suitable. Provide secure, suitable accommodation for learners and staff during residential or extended training programs.

5.5   IT INFRASTRUCTURE

The Accredited Training Centre should establish and maintain IT infrastructure that supports training operations by:

5.5.1 Sufficient. Ensuring reliable and secure access to digital learning resources, data storage, and learner management systems.

5.5.2 Security. Implementing cybersecurity measures to protect learner data, training materials, and communications.

5.5.3 Technical Support. Providing technical support and training to staff and learners to facilitate effective use of IT resources in training activities.

Specifications should detail the frequency with which skills should be practised to maintain competency.

5.6   DOCUMENTATION AND RECORD-KEEPING SPECIFICATIONS

The Accredited Training Centre should establish and maintain a comprehensive documentation and record-keeping system to ensure the integrity, accessibility, and confidentiality of training-related records.

5.6.1 Training Materials. Training content, course outlines, lesson plans, and associated materials should be maintained and version-controlled to ensure updates are consistently documented and aligned with regulatory and industry standards.

5.6.2 Learner Records. Accurate records of learner participation, assessment results, and feedback should be securely stored and accessible only to authorised personnel.

5.6.3 Assessment Documentation. All assessments, feedback forms, and learner evaluations should be documented and retained in accordance with data protection regulations.

5.6.4 Annual Review and Reporting. Records should be reviewed annually to maintain compliance with audit standards, and any adjustments or corrective actions should be documented to inform continuous improvement.

5.7 CONFIDENTIALITY AND DATA PROTECTION

The Accredited Training Centre should ensure all documentation, including learner feedback and sensitive records, complies with applicable data protection regulations, ensuring:

5.7.1 Secure. Secure storage of all personal information reviewed during audits, with access restricted to authorised personnel.

5.7.2 Private. Implementation of procedures to anonymise or redact sensitive information where necessary to protect learner privacy.

5.8 LOGISTICS

The Accredited Training Centre should ensure all logistical processes for training programmes are effectively managed to facilitate planning, communication, and post-course evaluation.

5.8.1 Programming. Training programmes should be scheduled and co-ordinated effectively, ensuring timely publication of schedules, allocation of resources, and resolution of scheduling conflicts to support successful delivery.

5.8.2 Joining instructions. The Accredited Training Centre should provide clear, comprehensive, and accessible joining instructions in advance, detailing course information, logistical arrangements, safety protocols, and points of contact to prepare learners for training.

5.8.3 Follow-up. The Accredited Training Centre should implement documented follow up procedures, including feedback collection, progress tracking, and ongoing support, to ensure post-course development and continuous improvement.

6 COMPETENCE SPECIFICATIONS

The Accredited Training Centre should ensure that all training personnel, including internal and third-party trainers, demonstrate the necessary qualifications, experience, and continuous development to deliver high-quality, compliant training.

6.1 Maintaining Competence

Accredited Training Centre should ensure that all training personnel, including internal and third-party trainers maintain training competence through:

6.1.1 Formal Training. Structured courses targeting specific objectives aligned with the Competence Framework.

6.1.2 Informal Training. Experiential learning opportunities such as mentoring and self-directed study.

6.1.3 Continuous Professional Development (CPD). Ongoing activities to enhance skills and knowledge.

6.1.4 Revalidation. Periodic assessments to ensure continued competence and alignment with current industry practices.

6.2 Managing Competence Fade. Competence fade should be managed through:

6.2.1 Regular Practice. Ensuring critical skills are routinely practised to reinforce proficiency and confidence.

6.2.2 Scheduled CPD Activities. Incorporating regular CPD activities to maintain alignment with industry standards and prevent atrophy of knowledge and skills.

6.2.3 Follow-Up Intervals. Implementing structured follow-up processes at defined intervals (e.g., 3, 6, and 9 months) to evaluate and support skill retention.

6.3 Competency Record-Keeping

The Accredited Training Centre should maintain up-to-date records of training personnel's qualifications, training history, and performance evaluations. These records should be accessible for audits and support compliance with regulatory standards.

7   TRAINING SPECIFICATIONS

The Accredited Training Centre should establish a structured process for the design, delivery, and evaluation of training programmes that covers the following key outputs. Whilst these key outputs are prescribed, flexibility is afforded to Accredited Training Centres to determine the best methods, tools, and resources for achieving the defined outcomes.

7.1   Course Design

Course design is essential to delivering courses that meet a defined Training Needs Analysis (TNA). To assure sound design, the Training Design System should evidence the following essential outputs:

7.1.1   Training Needs Analysis (TNA). Documentation identifying and analysing training requirements, outlining gaps between current and required competencies, and defining training objectives.

7.1.2   Regulatory Compliance Requirement Statement. A formal statement detailing compliance with applicable laws, industry standards, and guidance.

7.1.3   Training Performance Standard (TPS). Details the specific competencies achieved upon course completion.

7.1.4   Operational Performance Standard (OPS). Defines competencies required for applying skills in the workplace.

7.1.5   Continuation Training. Processes for follow-up at 3, 6, and 9 months to monitor skill retention and address skill fade.

7.1.6   Currency. The frequency with which skills should be practised to maintain competency.

7.1.7   Validity. The duration for which the course remains valid without formal update training to maintain competency.

7.1.8 **Target Audience**. The specific group of learners for whom the training is designed, detailing:

     7.1.8.1   **Sector**

     7.1.8.2   **Skill level** (e.g., Basic, Intermediate, Advanced).

     7.1.8.3   **Language proficiency**

     7.1.8.4   **Prior knowledge requirements.**

7.1.9 **Logistics**. The logistics for the course including:

     7.1.9.1   **Course Duration**

     7.1.9.2   **Course Location**

     7.1.9.3   **Course Cost**

     7.1.9.4   **Course Accommodation**

     7.1.9.5   **Course Timetable**

7.1.10 Training Content. Detailed topics, themes, and subject matter to be covered during the course, aligning with the defined learning objectives and required competencies.

7.1.11 Instructional Strategies. Methods and approaches used to deliver training, such as lectures, practical exercises, or group discussions.

7.1.12 Resources and Media. Tools, materials, and delivery platforms utilised to support the training, including physical or digital resources, handouts, or e-learning platforms.

7.1.13 Duration and Structure. Length and organisation of the training programme, including allocation of time to modules, sessions, or activities.

7.1.14 Assessment Strategy. The plan for evaluating learner achievement of the course objectives, including methods of assessment and success criteria.

7.1.15 Validation and Evaluation. Process of reviewing and confirming the course meets objectives, delivers value, and identifies improvement opportunities.

7.1.16 Currency Interval. Recommended frequency for reviewing and updating course content to reflect changes in best practices or standards.

7.1.17 Validity Interval. Period during which the course remains effective and relevant without requiring significant updates.

7.2 Training Documentation and Control

7.2.1 Documentation Control. All course documentation, including lesson plans, handouts, and presentations, should be version-controlled. Updates should include dates and details to prevent unauthorised alterations. Documentation should be secured and, where possible, "locked down" to prevent unauthorised modifications.

7.2.2 Accessibility and Security. Training documentation should be securely stored and accessible only to authorised personnel. Backups should comply with data protection regulations, ensuring the integrity and availability of materials.

7.3 Registered Courses.

Where the Institute will issue a certificate, the course should be registered with the Institute. Registering a course does not endorse or imply endorsement of the course content but simply that the course has been designed in accordance with the TQS.

7.3.1 Registering Courses with IExpE. To register a course with IExpE, ATCs should submit the course registration form which will ask for:

7.3.3.1 Course Prospectus. The course prospectus should include the data points in section 7.1 of the TQS.

7.3.3.2   **Course Naming**. Registering of courses allows IExpE to ensure conformity with the TQS process, prevent confusion with similarly named courses and allow IExpE. Titles should avoid using the term "Level" to prevent misrepresentation.

7.3.3.3   **Placing on the Register**. Registered Courses will be issued a course number and registered on the IEXpE website under the correct industry sector and stating the skill level (e.g., Basic, Intermediate, Advanced) that it delivers to.

7.3.2   Maintaining Registered Course Details. When courses registered with the Institute are reviewed and updated by the training centre, the institute should be informed or any certificate issued thereafter would be invalid.

7.4   Training Delivery

7.4.1   Competent Staff. Training should be delivered by qualified personnel with up-to-date knowledge and expertise to meet training competence requirements.

7.4.2   Safety and Compliance. Instructors should ensure safety, accessibility, and compliance measures are in place during all training sessions, particularly for live or practical components.

7.4.3   Training Delivery Materials. Learners should be provided with appropriate support materials, including presentations, handouts, manuals, and guides.

8   ASSESSMENT SPECIFICATIONS

8.1   Assessment of Learners

8.1.1   Assessment Against Training Outcome Statement. Assessments should be conducted impartially, reliably, and in alignment with TNA requirements.

8.1.2   Objective. Assessments should be fair, accessible, and free from bias to promote equal opportunities for all learners.

8.1.3   Investigation. Any incidents affecting assessment integrity or learner outcomes should be documented and investigated in accordance with SAT protocols.

8.2   Examination Bank Development and Maintenance.

A secure examination bank should be developed and maintained to support assessment requirements, with periodic reviews to ensure relevance.

8.3   Exam Content and Quality Control

Examination content should align with learning outcomes and occupational standards. Regular updates and quality control reviews should be conducted.

8.4   Security of Examination Bank and Environment

8.4.1   Controlled Access. Assessment materials should be accessible only to authorised personnel. Digital banks should be encrypted, and physical copies securely stored.

8.4.2   Examination Room Standards. Examination environments should be secure, with seating arrangements and surveillance protocols to prevent unauthorised access.

8.4.3   Invigilation Protocols. Exam invigilators should adhere to strict protocols to maintain exam integrity. Regular audits should ensure compliance.

8.5   Notification of Training Outcome

On successful completion of a registered course, the ATC should notify IEXPE of:

8.5.1   Registered Course Number

8.5.2 Learner Details. For each learner, the following details:
Learner number
Last Name
First Name
Date of Birth
Gender

Ethnicity
Postcode
Email
Employment Status
Assessment Marks
IExpE number (TBC if not yet a member)

8.6   CERTIFICATION

Upon notification IExpE will inspect the information. If the information is correct, IExpE will issue a certificate including the IExpE logo. On the reverse of the certificate will be listed:

Training Performance Standard.
Operational Performance Standard.
Continuation training requirements.
Currency statement.
Validity statements.

8.7   COMPLAINTS AND APPEALS

The Accredited Training Centre should implement a system for managing complaints and appeals that:

8.7.1   Recording. Tracks and records complaints and appeals in a secure and accessible format.

8.7.2   Investigation. Ensures prompt investigation and resolution of complaints and appeals impartially.

8.7.3   Appeals management. Adheres to established policies for complaints, appeals, and incident management.

9.   QUALITY SPECIFICATIONS

The Accredited Training Centre should implement a structured Training Quality Management System (TQMS) framework to systematically monitor compliance, quality, and effectiveness across training programs, with a focus on continuous improvement through audits, corrective actions, and performance evaluations

9.1 TRAINING VALIDATION (ENSURING TRAINING IS EFFECTIVE)

The Accredited Training Centre should ensure that training is valid by formally **evaluating the training program against its objectives** to ensure it meets the identified needs, adjusting where necessary to optimise outcomes.

9.1.1 Feedback. Gathering feedback from learners and stakeholders on the quality and effectiveness of training sessions.

9.1.2 Review. Conducting internal reviews and observations of training sessions to ensure delivery methods meet established standards.

9.1.3 Monitor. Monitoring instructor performance, including adherence to training plans, learner engagement, and feedback responsiveness.

9.1.4 Records. Documenting evaluations and using feedback to inform improvements in instructional techniques and training content.

9.1.5 Follow up. Contact learners after a set period to assess skill fade and update learning. This data is fed back to IExpE to inform understanding of competence variation.

9.2 TRAINING EVALUATION (ENSURING TRAINING IMPROVES)

The Accredited Training Centre should ensure that training is evaluated by formally assessing the **effectiveness of the training over time**, using feedback and performance metrics to measure impact on the job or operational effectiveness.

The Accredited Training Centre should implement quality assurance processes to ensure the effectiveness and compliance of training programs by:

9.2.1 Gather data. Conducting ongoing monitoring and evaluation of training programs to identify opportunities for improvement.

9.2.2 Data analysis. Using learner feedback, performance metrics, and audit results to inform continuous improvement initiatives.

9.2.3 Implement improvements. Implementing corrective and preventive actions to address identified nonconformities and enhance training outcomes.

9.3 INTERNAL AUDIT

The Accredited Training Centre should establish and maintain an internal audit process to ensure continuous compliance and improvement across training programs. The internal audit process should include the following elements:

9.3.1 Audit schedule. Establish an internal audit schedule covering all aspects of the Training Quality Management System (TQMS) with audits conducted at least annually and additional audits as needed based on risks or regulatory changes.

9.3.2 Scope of audits. Internal audits should verify compliance with standards, regulatory requirements, and objectives, including evaluations of training design, delivery, assessment, and feedback.

9.3.3 Audit criteria and documentation. Define criteria and documentation standards for internal audits to ensure consistency. Auditors should review relevant documents, observe training sessions, and interview relevant staff.

9.3.4 Non-conformity and corrective actions. Document non-conformities identified in audits, assign corrective actions with deadlines, and conduct follow-up audits to verify effectiveness.

9.3.5 Audit records and reporting. Maintain comprehensive records of internal audits, including findings and corrective actions. Prepare summary reports for review by stakeholders.

9.3.6 Continuous improvement. Use audit findings to identify improvement opportunities in training practices, administrative processes, and quality management, guiding updates to policies and procedures.

9.4 EXTERNAL AUDIT SCOPE AND SCHEDULE

IExpE will inspect the Accredited Training Centre according to the following structured audit schedule:

9.4.1 Initial full-scope audit. Conducted prior to the award of accreditation during the Accredited Training Centre application process to evaluate all compliance and quality standards, including documentation reviews, on-site inspections, and observation of teaching practices.

9.4.2 Biennial full-scope audit. A comprehensive audit conducted every two years to assess continued adherence to all quality and compliance standards.

9.4.3 Interim targeted audits. Performed annually between full-scope audits, focusing on critical areas and including additional audits in response to incidents, complaints, or recurrent non-conformities.

9.5 RISK-BASED AUDITS

IExpE may implement a risk-based approach to audits, prioritising high-risk areas:

9.5.1 High-risk activities. Training activities involving high-explosive materials or regions with heightened regulatory requirements should be audited more frequently.

9.5.2 Risk assessment review. Risk criteria should be reviewed and updated annually based on findings from incidents, reports, and regulatory changes.

9.6 ANNUAL REPORTING REQUIREMENTS

Accredited Training Centres will submit an annual report to support compliance and quality monitoring, including:

9.6.1 Course delivery statistics. Total courses delivered and learner enrolment figures.

9.6.2 Learner feedback summaries. Key feedback points and summaries of corrective actions implemented in response to audit findings.

9.6.3 Policy and documentation updates. Up to date insurance policies, annual training records, and a sample review of learner feedback forms.

9.7 AUDIT REPORTING AND FOLLOW-UP

Upon completion of each audit, IExpE will issue a comprehensive report containing:

9.7.1 Strengths and improvement areas. Identified strengths and necessary improvements in training delivery and management.

9.7.2 **Corrective actions**. Specific corrective actions with assigned timelines to address areas of non-compliance.

9.7.3 **Recommendations**. Suggestions to support continuous improvement and uphold training quality standards.

9.8 STAKEHOLDER ENGAGEMENT IN FEEDBACK AND IMPROVEMENT

The Accredited Training Centre should engage relevant stakeholders in the feedback process to enhance audit relevance and quality improvement, including:

9.8.1 **Learners and instructors**. Collect input on training content, delivery, and assessment processes.

9.8.2 **Regulatory bodies**. Align feedback collection and audit findings with external compliance expectations and best practices.

9.8.3 **Continuous improvement team**. Regularly review stakeholder feedback as part of quality and compliance updates.

ANNEX A - SATELLITE CENTRE QUALITY SPECIFICATION

INTRODUCTION

This Annex outlines the additional specifications for Satellite Centres operating under the IExpE Accredited Training Centre (ATC) Network model. Satellite Centres are affiliated entities governed by an Accredited Training Centre (ATC) and should adhere to the standards set forth by IExpE to ensure compliance, quality, and competence in explosives training.

Satellite Centres are categorised as Franchise Satellites or Independent Satellites, each with specific requirements and responsibilities, as detailed below.

A. GENERAL SPECIFICATIONS FOR SATELLITE CENTRES

A.1　Affiliation and Governance

Satellite Centres should operate under the governance of a parent ATC. The ATC is responsible for overseeing the Satellite Centre's compliance with IExpE quality specifications, including audits, training delivery, and adherence to applicable regulations.

A.2　Compliance with IExpE Standards

Satellite Centres should comply with the IExpE Training Quality Specification (TQS) and meet additional requirements set by their parent ATC. Non-compliance may result in suspension or termination of affiliation.

A.3　Declaration of Compliance

Each Satellite Centre should submit an annual declaration confirming adherence to local, national, and international regulations relevant to explosives training and handling.

A.4　Operational Specifications

A.4.1　Training Scope: Franchise Satellites may deliver live and theoretical training as approved by the parent ATC. Independent Satellites are restricted to theoretical training only.

A.4.2 Documentation: Maintain up-to-date training materials, learner records, and audit documentation as per ATC and IExpE requirements.

A.4.3 Insurance Coverage: Ensure adequate insurance, including public liability and employer's liability, covering all training activities.

B.   FRANCHISE SATELLITE SPECIFICATIONS

B.1   Branding and Materials

Franchise Satellites should use branding, training materials, and resources provided by their parent ATC. All materials should meet IExpE standards and be version-controlled.

B.2   Certification Process

Certificates issued by Franchise Satellites should be approved by the parent ATC and carry the IExpE logo. Records of certification should be maintained and made available for audit.

B.3   Annual Fee Structure

Franchise Satellites are subject to fees as outlined in the ATC Rate Card, including:

Annual fees payable to the parent ATC.

Certification fees payable to IExpE for each learner trained.

B.4   Audit And Quality Assurance

Parent ATCs should conduct annual audits of Franchise Satellites to verify compliance with IExpE and ATC standards. Findings should be reported to IExpE.

C.   INDEPENDENT SATELLITE SPECIFICATIONS

C.1   Autonomy and Branding

Independent Satellites operate under their own branding but should affiliate with a parent ATC for governance, certification, and audits. They may not use live explosives for training.

C.2   Training Delivery

Independent Satellites may only deliver theoretical training, ensuring strict compliance with TQS and applicable regulations.

C.3   Certification Process

All certifications should be issued through the parent ATC and conform to IExpE standards. Independent Satellites should maintain detailed learner records and certification documentation.

C.4   Annual Fee Structure

Independent Satellites are subject to fees as outlined in the ATC Rate Card, including:

Annual affiliation fees payable to the parent ATC.

Certification fees payable to IExpE for each learner trained.

C.5   Audit And Quality Assurance

Independent Satellites should undergo annual audits by their parent ATC. These audits will focus on compliance, training quality, and record-keeping. Audit results should be submitted to IExpE.

D.   ADDITIONAL RESPONSIBILITIES OF PARENT ATCS

D.1   Governance of Satellites

Parent ATCs should provide governance and support to their affiliated Satellite Centres, ensuring compliance with IExpE standards and regulations.

D.2   Data Reporting

Parent ATCs are responsible for reporting the performance of their Satellite Centres to IExpE, including training outcomes, learner feedback, and audit findings.

D.3   Training and Development

Parent ATCs should ensure that Satellite Centre trainers and assessors receive regular professional development to maintain competence and align with industry best practices.

D.4   Dispute Resolution

Parent ATCs should establish a clear process for resolving disputes with or within Satellite Centres, ensuring fairness and transparency. Any matters of doubt should be referred to IExpE.