

1. Purpose

This policy sets out Hardium's commitment to delivering safe, compliant, right-first-time engineering and consultancy services across nuclear and high-hazard industries. It is aligned with ISO 9001, ISO 19443, and UK regulatory expectations including ONR SAPs/TAGs, IRR17, CDM 2015, and COMAH.

2. Scope

Applicable to all Hardium staff, associates, subcontractors and partner SMEs involved in:

- ✓ Nuclear engineering and design
- ✓ Fuel-cycle and process engineering
- ✓ Safety case and regulatory support
- ✓ Compliance and assurance
- ✓ Technical consultancy
- ✓ Digital and computational engineering

3. Quality Commitments

3.1 Right-First-Time Delivery

We deliver technically correct, safe, traceable and compliant work that meets client, regulatory and legal requirements on first issue wherever possible.

3.2 Nuclear Safety Culture

We promote WANO/INPO-aligned behaviours:

- ✓ Personal responsibility
- ✓ Questioning attitude
- ✓ Rigorous verification and validation
- ✓ Respect for procedures
- ✓ Clear, timely communication
- ✓ Independent challenge

3.3 Technical Governance & Nuclear Assurance

As a specialist consultancy, Hardium demonstrates the behaviours expected of a competent nuclear supplier. We understand,

interpret, challenge and assure technical requirements to support our clients in meeting their own regulatory duties. Our governance is aligned with ONR SAPs and relevant TAGs, recognising that IC/DA responsibilities remain with the Licensee or Dutyholder.

3.4 SQEP & Competence

We maintain suitably qualified and experienced personnel in:

- ✓ Radiation protection
- ✓ Process safety and COMAH disciplines
- ✓ Nuclear codes, standards and safety
- ✓ High-hazard engineering

3.5 Graded Approach

We apply proportional controls consistent with ISO 19443, focusing effort and rigour based on nuclear safety significance and potential consequences.

3.6 Integrated Management System (IMS)

We operate a structured IMS covering policies, strategies, procedures, work instructions, templates, forms, technical review, configuration control and lessons learned.

3.7 Continuous Improvement

We investigate non-conformances, implement corrective actions, analyse trends, and act on learning from audits, operations, and regulatory developments.

4. Standards & Regulatory Alignment

4.1 Nuclear & High-Hazard Frameworks

Our work is aligned with:

- ✓ ONR Safety Assessment Principles and relevant TAGs
- ✓ Ionising Radiations Regulations 2017 (IRR17)
- ✓ Construction (Design & Management) Regulations 2015 (CDM)
- ✓ COMAH and process safety principles
- ✓ We support clients in demonstrating compliance with their legal obligations.

4.2 Quality Management Standards

We adopt and integrate principles of:

- ✓ ISO 9001:2015
- ✓ ISO 19443:2018
- ✓ ISO 10007 (Config Management)
- ✓ ISO 31000 (Risk Management)
- ✓ ISO 44001 (Collaboration)

4.3 Engineering Standards

Where relevant, we follow applicable industry codes such as:

- ✓ ASME III / VIII / B31.3
- ✓ RCC-M
- ✓ EN / BS standards
- ✓ IEC 61508 / 61513
- ✓ Electrical, mechanical and process safety standards

5. Roles & Responsibilities

5.1 Founder & Director (Policy Owner)

- ✓ Sets quality vision and governance
- ✓ Ensures resources and SQEP
- ✓ Approves the policy
- ✓ Promotes nuclear safety culture

5.2 Technical Governance Lead

- ✓ Maintains the IMS
- ✓ Oversees independent challenge and design review
- ✓ Ensures alignment with ISO 19443

5.3 Project & Technical Leads

- ✓ Deliver right-first-time outputs
- ✓ Apply the graded approach
- ✓ Maintain accurate records and traceability

5.4 All Personnel & Associates

- ✓ Follow the IMS
- ✓ Maintain a questioning attitude
- ✓ Raise concerns without fear

5.5 Supply Chain & Partner SMEs

- ✓ Operate in accordance with the Hardium IMS
- ✓ Demonstrate ISO 9001/19443 alignment
- ✓ Maintain effective assurance and traceability

6. Review

This policy is reviewed annually, or sooner following:

- ✓ Regulatory changes
- ✓ Major incidents or findings
- ✓ Audit outcomes
- ✓ Client feedback

Updated versions are communicated to all personnel and partner SMEs.

7. Approval

David Hardy

Founder & Director

Hardium Ltd

 David Hardy