



# Technical Compliance of Products



Manufacturers of electronic, electrical and mechanical products and their supply chains are faced with ever-growing, complex, variable and onerous regulatory requirements. These can directly impact product designs and drastically affect costs and delivery if not properly managed. Legal compliance and technical conformance with legislation, standards, codes of practice and guidance at regional, national, and supranational levels, are all necessary for the trouble-free introduction of products into markets globally.

The regulatory environment is constantly changing, with many countries adopting new safety and associated legislation that often follows the EU or US, but with local variations in obligations. Some require pre-certification before products can be sold.

Different markings (e.g. the CE or UKCA Mark) are required in different regions around the world. The sheer volume and complexity of this legislation makes it very hard for an individual company to keep up with ever-changing developments and the expectations of market surveillance authorities. It is increasingly common for products to be held up by customs because of non-compliance with national legislative requirements.

RINA can advise you on how to meet your compliance obligations. RINA can assess your product, interpret the applicable legislation as it applies to you, and guide you through the relevant conformity assessment procedures.

With practical knowledge and experience of the design, manufacture, installation, operation, maintenance, failure and repair of a wide range of mechanical, electrical and electronic systems, RINA provides a recognised pathway to compliance, using and enhancing your own procedures.

Product safety is not simply a matter of compliance with standards; this is only a starting point. Interpretation of regulations and application and adaptation of standards, guidance and other best practices are crucial elements in ensuring product safety.

RINA staff have wide experience of these matters, we can deliver expert advice on your approach and work with you to develop the essential documentation you require to show due diligence.

## RINA's Services include:

- Definition of legal obligations applicable to your product - UK, EU and global
- Guidance on conformity assessment procedures and routes
- Identification of potentially applicable standards and assistance with their interpretation.
- Identification of changes in legislation & standards, gap analysis and impact assessment
- Provision of practical compliance advice, e.g. assessment and mitigation of risks
- Compliance Documentation generation and review, risk assessment and gap analysis
- Verification testing - RINA is a UKAS accredited test facility able to support compliance verification testing across a number of areas
- Training - RINA runs a variety of face-to-face and online public one-day training courses, as well as developing bespoke training courses for customers on their premises

## Project experience

These are a small sample of the projects completed by RINA:

- HIGH CAPACITY BATTERY MANUFACTURER: Regulatory and technical compliance guidance and advice
- CIVIL ENGINEERING CONTRACTOR: Assessment of fitness for purpose of large flagship industrial lighting system
- MULTINATIONAL ELECTRICAL PRODUCTS SUPPLIER: Definition of global compliance requirements for million-selling consumer IT product
- RENEWABLE ENERGY SYSTEM MANUFACTURER: Assessing requirements for import of wind turbine system into the EU market
- INDUSTRIAL AUTOMATION: Definition of the compliance requirements for installation of machinery in various jurisdictions globally
- DEFENCE: Assessment of compliance documentation for imported products
- BUILT ENVIRONMENT: Risk assessment of field failures with a view to potential remedial action (e.g. product recall)

## Experience

In the context of equipment and systems, RINA staff have a comprehensive understanding and experience of:

- REGULATIONS AND STANDARDS: How they can be used to advantage and minimize the burden on businesses
- DESIGN: Decisions and practical choices; the importance of specifications, tolerances and resilience; budgetary and time constraints
- MANUFACTURING: Organisation, administration and control of consistency and quality, control of supply, suppliers and budgets
- INSTALLATION, OPERATION, MAINTENANCE: Operations and procedures, risk assessment, product documentation requirements, training
- FAILURE INVESTIGATIONS AND REPAIR: Diagnosis of the root causes of failures and recommend corrective action
- QA/QC: Knowledgeable on practice including preparation of specifications, sealing of samples, preparing sampling plans (use of AQL) and performing inspections, supplier selection and factory auditing

