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Understanding the Emirates Conformity Assessment Scheme (ECAS)

Information for exporters



Introduction

The United Arab Emirates (UAE) is the UK's biggest export market in the Middle East and the 13th largest globally, according to the Department for International Trade (DIT). It is also, however, an increasingly crowded market. The DIT notes that competition is fierce – not only from North America and the rest of Europe but also from high-growth Asian economies such as India and China.

Manufacturers of electrical and electronic equipment must comply with the Emirates Conformity Assessment Scheme (ECAS), a mandatory regulatory scheme.

This document provides an overview of the requirements for ECAS. We show how BSI experts can work with you to access the UAE market.

Given Emirates' standards are often adopted by neighbouring countries such as Qatar, Oman, Kuwait and

Saudi Arabia, it is also relevant for Middle Eastern markets outside the seven states that make up the UAE.

The brochure looks at some general ECAS rules and at some specific ECAS rules for Energy Efficiency Standards Labelling (EESL), lighting products and Low Voltage Equipment (LVE). Information on the Restriction of Hazardous Substances (RoHS) rules in the programme is provided in a separate BSI document.

About ECAS



The Emirates Conformity Assessment Scheme (ECAS) is run by the Emirates Authority for Standardisation and Metrology (ESMA), which was established by the UAE Government as its sole national standards body in 2001 by Federal Law 28.

The main purpose of the scheme can be described as ensuring “appropriate measures” are taken to protect people, animals and property – and the planet. Accordingly, it includes safety, energy efficiency and environmental requirements.

The scheme covers a range of sectors and categories, including electrical and electronic devices and certain gas products, and is constantly evolving, with new rules introduced for electrical and electronic equipment (EEE) sub-assemblies and components in January 2018.





ECAS compliance: the general rules

The scheme is divided into technical requirements and administrative requirements for the manufacturer and their authorized agent in the Middle East. The former are based on UAE standards and/or equivalent international and other standards (for example, European standards or ENs); the latter relate to conformity assessment procedures, documentation (for example, technical files), declarations of conformity and product information, product marking, manuals and instructions.

The dynamic nature of the ECAS programme — there were new rules in 2016 as well as 2018 — it can be a challenge for manufacturers to keep up-to-date. Some basic requirements, though, always apply. These can be summarized as:

- 1 Keep technical documentation** (a technical file) for each model and product range, in English and Arabic
- 2 Type test** (or conformance test) all products to IEC (International Electrotechnical Commission) standards
- 3 Make sure your factory is inspected** regularly by a Notified Body such as BSI
- 4 Provide an ECAS Certificate of Conformity** from an ESMA Notified Body such as BSI
- 5 Register your certified product** on the ESMA database.
- 6 Provide information for customers in Arabic** as well as English.

Note the critical role of the Notified Body. You cannot self-declare or self-certify that you've met ECAS standards: you have to use an ESMA-approved third party. In some cases, there will be a presumption of conformity if normative IEC standards have been met; in all cases, however, you need proof of conformity — a certificate — from a Notified Body. No manufacturer can affix the Emirates Quality Mark (EQM) to a product unless a Notified Body has inspected its premises and authorised it to do so. Certification by an independent third party is a seal of approval, without which market access is denied.

Once an ECAS Certificate of Conformity (CoC) has been issued, a product can be registered on the ESMA database and an ECAS registration certificate can be provided. Both the CoC and registration certificate are required by the UAE at Port of Entry, and without them shipments can be held in quarantine.

In the event of non-compliance, manufacturers can rectify problems and re-apply for certification and database registration. In the event of design modification to a product or a change to the way it's manufactured, they must inform the Notified Body so they can carry out a review.

Note, where the BSI Kitemark™ has already been awarded, there will be a presumption that a product qualifies for the EQM. In this sense, the Kitemark is a direct route to the UAE.



BSI Kitemark™ certification: giving access to the Middle East

Energy Efficiency Standards Labelling (EESL): the ECAS rules

The ECAS regulations mean certain products must be given a star rating for energy efficiency and be labelled accordingly, with five stars being the most efficient and one star being the least efficient. Products within the scope of the EESL rules include:

- commercial and domestic air conditioning systems
- washing machines and dryers
- refrigerators
- water storage heaters
- dishwashers

The star ratings are determined by testing cooling capacity performance and consumption limits and calculating Energy Efficiency Ratios (EERs) or Energy Efficiency Index (EEI) scores.

The ECAS programme mandates UAE and normative IEC standards as a means of supporting the requirements of the EESL regulations, and where these standards have been met, there will be a presumption of conformity and correct calculation of the EER or EEI. Products identified in the scope of the EESL are subject to a Type 3 Conformity Assessment Programme under ISO IEC 17067, and an inspection of the manufacturer's factory must be carried out by a Notified Body such as BSI.

BSI will test samples, review technical files and performance reports, carry out a factory inspection and, if relevant UAE and international standards have been met, issue a BSI Certificate of Conformity with ECAS rules for EESL and authorise the EQM.



ECAS rules for lighting products

The ECAS programme for lighting products covers rules for:

- electrical safety
- performance: energy efficiency
- functionality
- hazardous chemicals
- safe disposal.

Administrative requirements cover rules for product information and product marking — for example, the use of the Arabic language in instruction manuals.

The programme includes regulations that were introduced by the UAE government in 2016. These regulations, known

as Cabinet Order No. 34, apply to non-directional lamps, luminaires and control gear traded and used in the UAE, with some exemptions. It should be noted that not all the requirements apply to all the products within the scope of the regulations. Compliance, therefore, can be a challenge.

BSI can guide you through the rules and issue Certificates of Conformity and, where factory inspections take place, authorize EQMs for lighting products.

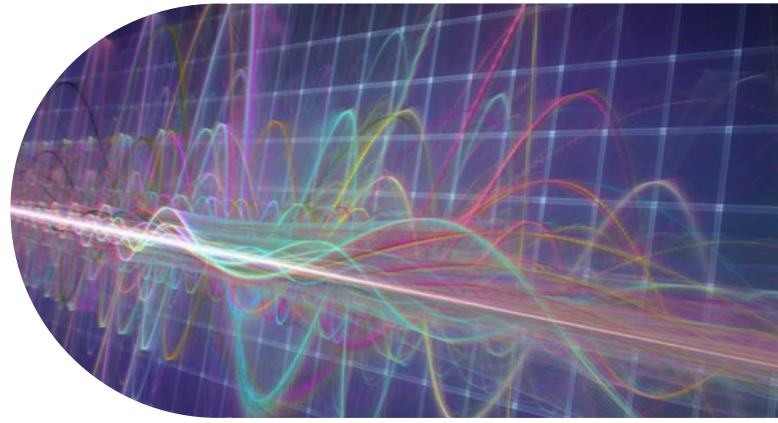
There are BSI Kitemark certification schemes for a range of lighting products, including commercial lighting and luminaires, and holding a BSI Kitemark will help clients become eligible for an EQM.

ECAS rules for Low Voltage Equipment (LVE)

The articles that form the ECAS Low Voltage Technical Regulation have been taken from the IEC CB scheme and include Essential Safety Requirements (ESRs).

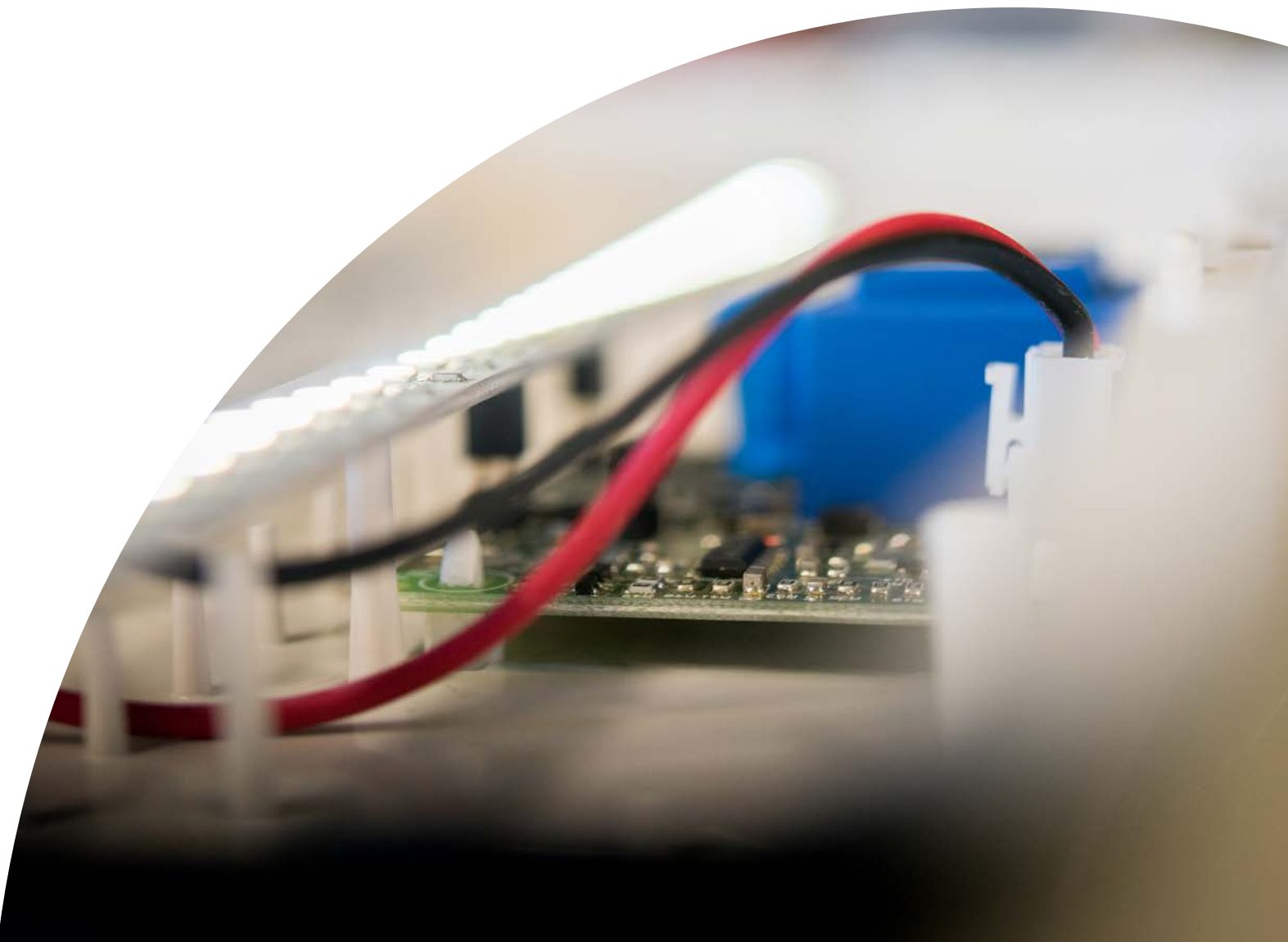
There are both technical and administrative requirements. Anyone wishing to place Low Voltage Equipment on to the UAE market must ensure:

- The essential electrical characteristics of the product are identifiable and there are instructions for use (in Arabic as well as English).
- There is adequate protection against electric shock or physical injury via direct or indirect contact.
- The product has been designed to ensure that temperature (excessive heat), arcs, radiation and electromagnetic influences do not cause harm to individuals, property or the environment.
- The product is designed correctly, using suitable materials, electrical insulation, and that all foreseeable mis-use conditions have been considered.
- The characteristics of electrical supply in the UAE have been considered.



LVE is defined as equipment designated for use with a supply voltage between 50 and 1,000 volts for alternating current and between 75 to 1,500 volts for direct current. ESMA provides a list of electrical and gas appliances covered by the ECAS LVE technical regulations.

Presumption of conformity is achieved by meeting the relevant UAE standards. However, ESMA also recognises other international standards such as IEC and ISO and EN. Where a relevant ESMA standard does not exist, or has not been published, the current issued version of IEC standards will be accepted.



Five reasons to choose BSI for product testing and certification

- 1 BSI Kitemark certification is equivalent to the Emirates Quality Mark
- 2 We have offices in **Abu Dhabi** and **Dubai**, and a customer 'happiness centre' in **Oud Metha** to support manufacturers and traders in making applications for ECAS and EQM certification
- 3 We have a good working relationship with ESMA, having assisted with the development of its certification schemes
- 4 We work with regulators and trade associations in multiple markets to understand the challenges faced by businesses today
- 5 We are the world's first standards organization, we have an unbeatable reputation for quality and safety

What happens next?

To find out more about ECAS and how we can help:

Call: +44 (0)345 0765 606

Email: product.certification@bsigroup.com

Visit: bsigroup.com/appliances

Our Sales and Certification team will then work with you to review any existing certificate(s) and understand what your requirements are.



Why BSI?

For over a century BSI has championed what good looks like and driven best practice in organizations around the world. As one of the founding members of ISO, we help make sure international standards developed address today and tomorrow's business and social needs, while delivering real benefits to an organization and all its stakeholders.

We work closely with leading manufacturers to ensure their products meet the latest Regulations to gain market access. We focus on delivering a testing and certification partnership underpinned by quality, safety, reliability and accuracy aligned to

your product development requirements. That's why we're best placed to help you understand standards and to meet the requirements.



From shaping collective best practice with our knowledge solutions to product testing, certification, and environmental health and safety professional services, we are committed to innovating and collaborating with our clients to build a safer more resilient tomorrow – one that protects buildings, assets, the environment and most importantly people.

bsi.

BSI Group
The Mira Corporate
Suites, Plot No 1 & 2
Ishwar Nagar New Delhi
110065, India

T: +91 11 4762 9000
bsigroup.com/en-in

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