



Emirates Authority for Standardization and Metrology

UAE Scheme for Control on Electrical Appliances Intended for use in explosive areas

هيئة اتحادية | Federal Authority





Brief about ESMA

- The Emirates Authority for Standardization and Metrology (ESMA) was established as a federal body, financially and administratively, by Federal Law No. 28 of 2001. The Board of Directors is chaired by H.E. Sultan bin Saeed Al Mansouri, Minister of Economy.
- ESMA provides standards, conformity assessment and accreditation services in accordance with international requirements and practices. The Commission has developed these services and has increased its level of performance to the level of international bodies providing similar standardization services.
- ESMA is the only authority authorized by the United Arab Emirates to exercise administrative responsibilities by unifying management, supervision and coordination of standards, and quality control.







Mandates

- Develop and issue UAE national standards.
- Provide UAE standards publications through ESMA's website & Standard Store.
- Ensure consumers safety and environmental protection while supporting the UAE economy through the implementation of UAE standards.
- Represent UAE in conferences and assemblies on the GCC, MENA and international levels.
- Develop and implement the national system for measurement and calibration and monitor its application.

- Provide up-to-date information on standardization and relevant activities and stakeholders at the national, regional and international levels through the Information Center.
- Monitor the implementation of approved UAE standards, grant the Emirates Quality Mark (EQM) to national products, and issuing certificates of conformity.

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Stratagic Plan 2017-2021





United Arab Emirates



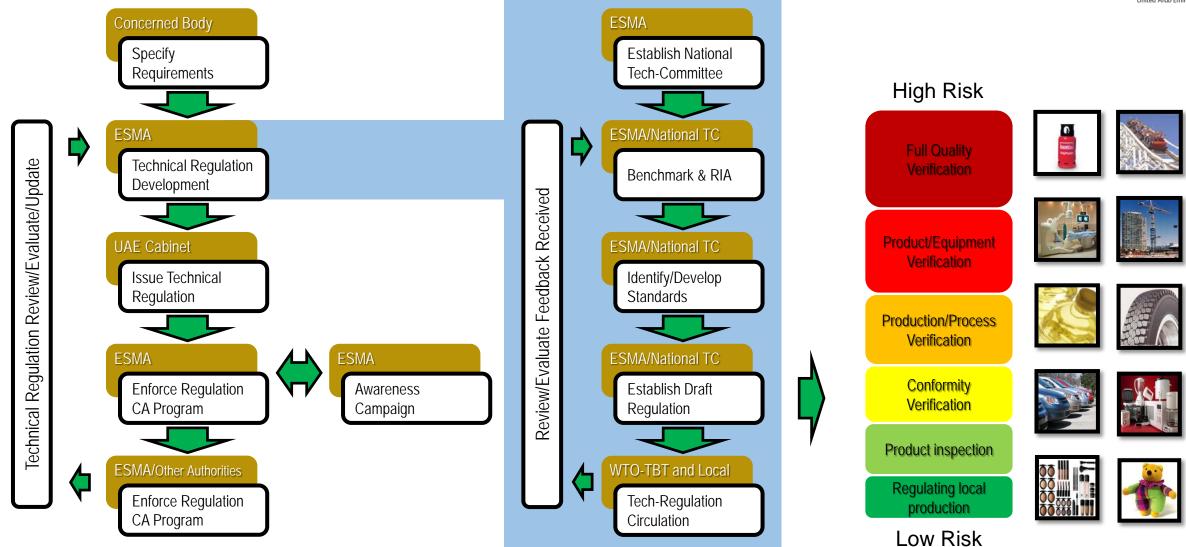


Quality Infrastructure















GLOBAL ALIGNMENTSystems and Processes





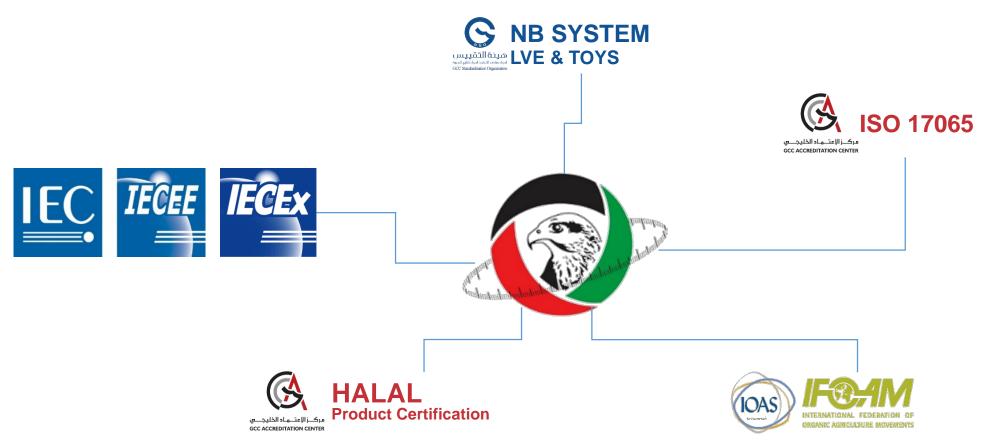
Recognitions and Memberships







Systems Alignment









ECAS-Ex Equipment for Explosive Atmospheres





Protective Measures

When electrical equipment is to be installed in areas where dangerous concentrations and quantities of flammable gases, vapors, mists or dusts may be present in the atmosphere, protective measures are applied to reduce the likelihood of explosion due to ignition by arcs, sparks or hot surfaces, produced either in normal operation or under specified fault conditions.

Preventive measures to reduce the explosion risk from flammable materials are based on three principles, which shall be applied in the following order:

3. Mitigation

Involves:

reducing the number of people exposed;

providing measures to avoid the propagation of an explosion

1. Substitution

Involves:

replacing a flammable material by one which is either not flammable or less flammable

2. Control

Involves:

reducing the quantity of flammables avoiding or minimizing releases



قرار مجلس الوزراء راتم (23) لسنة 2016 بشأن النظام الإمارتي للرقابة على الأجهزة الكهربائية

ىجلس الوزراء:

- بعد الاطلاع على النستور،
- وعلى القانوين الاتحادي رقم (1) لسنة 1972، بشأن اختصاصات الوزارات ومسائحيات الوزراء، وتعديلاته،

المعدة للاستخدام في الأجواء القابلة للانفجار

- وعلى القانون الاتحادي رقم (28) لسنة 2001، بإنشاء هيئة الإمارات للمواصفات والمقاييس، وتعديلاته،
 - · وعلى القانون الاتحادي رقم (2) لسنة 2015، بشأن الشركات التجارية،
 - وطى الفانون الاتحادي رقم (24) لسنة 2006، في شأن حماية المستهلك، وتعديلاته،
- وعلى قرار مجلس الوزراء رقم (22) لسنة 2004، في شأن اللائحة التغيذية لنظام الاعتماد الوطني،
- وعلى قرار مجلس الوزراء رقم (35) لسنة 2015، بشأن نظام الرقابة على جهات
 تقييم المطابقة،
 - ويناء على موافقة مجلس الوزراء،

التعاديف

في تطبيق أحكام هذا الغرار، يُقصد بالكلمات والعبارات التالية المعاني المُبينة إزاء كل منها، ما لم يدل سياق النص على غير ذلك:

الدولة : الإمارات العربية المتحدة.

لهيئة : هيئة الإمارات للمواصفات والمقاييس،

لمجلس : مجلس إدارة الهيئة.

المدير العام : المدير العام للهيئة.

الجهة المختصة : الجهة الاتحادية أو المحلية المختصة في الدولة، والتي يُناط بها

تطبيق أحكام هذا القرار.

Brief about the scheme:

Legal reference:

UAE Scheme for control Electrical Appliances intended for use in explosive areas was approved based on cabinet decree no.(23) for the year 2016.

- **Publication date in official gazette:** 31 July 2016
- **Effective on:** the day after the publication

Transition period:

- 180 days for products **not** in the Market
- 1 year for the products **placed** on the market or **contracted** before the publication of this resolutions





Scope

The resolution is applicable on the followings:



Products run under **electric Power** in explosive areas including the followings:

- Equipment that generate, transport, distribute, store, measure and set the devices work by electrical Power, consume electricity, electrical and telecommunication equipment



Parts and Components that form part from the electrical system that should not be used alone in an explosive area and requires additional certificate when companied in electrical systems used in explosive areas





ECAS-Ex Certificate of Conformity (CoC)

• Gaining an ECAS-Ex Certificate of Conformity for a product provides a manufacturer with an International Statement that:

Certified Products are manufactured to meet the listed International IEC Standard

Manufacturer is operating a dedicated quality management system, meeting the specific ECAS-Ex requirements

Manufacturer is under on-going surveillance by an Internationally assessed and recognized ECASEx Certification Body





Responsibilities



Supplier



Grant Certificate of
Conformity from ESMA for
regulated Products as
specified in the Annex of the
Scheme

Cooperate with ESMA and competent authorities to provide them with all documents, examination certificates, if any, and any other documents related to the product upon request

Assurance of Product
Compliance with the
requirements of the Scheme
continually throughout the
use of the product in
accordance with specific
usage instructions



Responsibilities



Coordination with market surveillance authorities to make sure the products are granted Conformity Certificate based on the provision of this resolution

Identify and Classify the areas that in which the product is potentially explosive, and determine the Products and Electrical Equipment type and standards which must or may be used







Responsibilities



Entity and Users

All the product parts are assembled and working as appropriate

Maintenance Procedure to be done based on the Manufacturer instructions or any requirements specified in UAE Standards UAE.S IEC 60079-14 and

UAE.S EC 60079 -17)

that prove that the products is granted with Conformity Certificate (ECA-SEx) from ESMA

Maintain the documents





Conformity Requirements

The Product should be granted with Conformity Certificate before placing the product in the

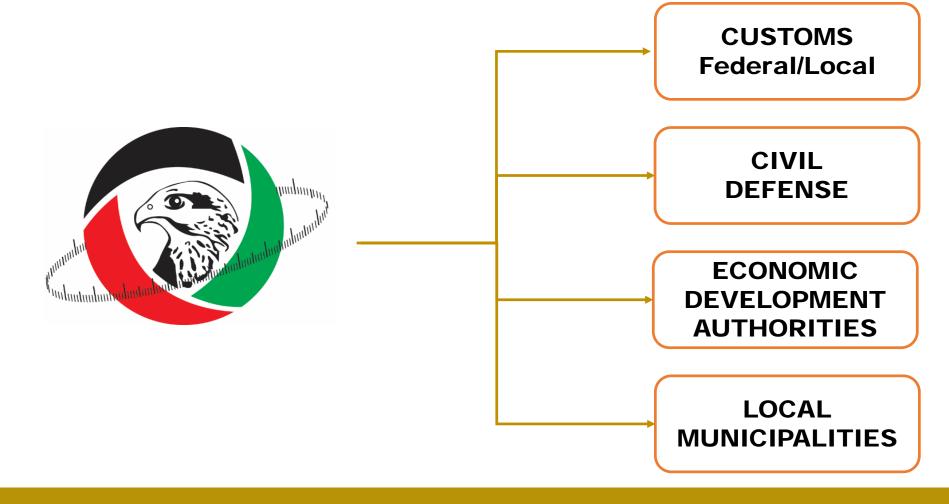
market and after assuring the compliance with the following requirements:

- 1. Compliance with requirements of the approved standards in the annex of this resolution.
- 2. The effective Implementation by the manufacturer of the Quality Management System (ISO 9001) or (ISO / UAE.S IEC 80079-34).
- 3. Providing the documents that proof the compliance of the product which should be attached with it based on the international standard (UAE.S IECEx OD-017)
- 4. To be tested in accredited laboratories (ExTLs) that can issue a test report (ExTR) recognized by (UAE.S IECEx)
- 5. The acceptance of (ExTR) in case of the availability of the assurance of manufacturer quality and the certificate of conformity for the products based on the international regulation (UAE.S IECEx) from recognized entity.
- 6. Verification of the Manufacturer Quality Management System by ESMA or any of the recognized certification bodies based on the regulation of certificate issuance in the international regulation (ExCB) (UAE.S IECEx).





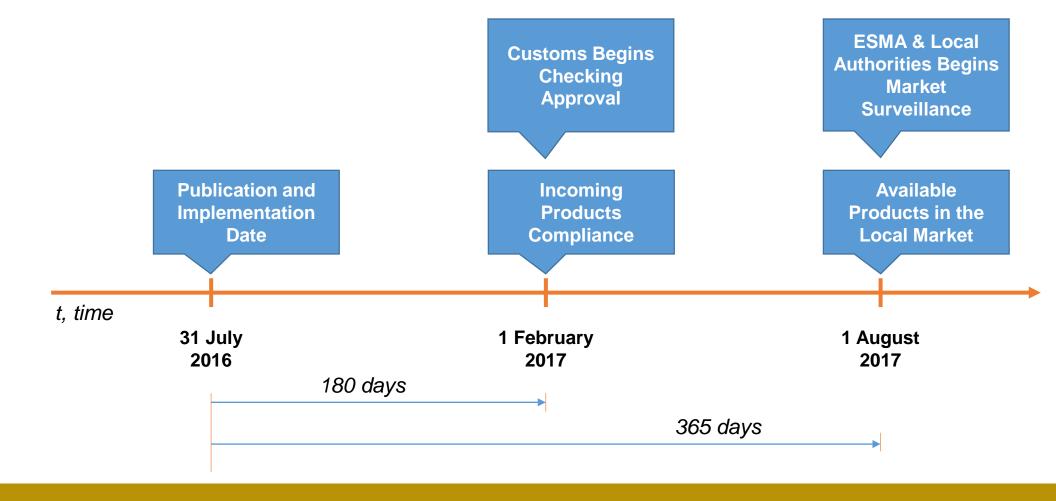
Market Surveillance Partner







Timeline







شكراً لكم Thank You