

*POTENTIALLY EXPLOSIVE
ATMOSPHERES, THE
ATEX DIRECTIVE AND
STANDARDS*

*WEBINAR
29TH NOVEMBER 2022*



POTENTIALLY EXPLOSIVE ATMOSPHERES, THE ATEX DIRECTIVE AND STANDARDS

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STANDARDS OFFICER



AGENDA

Section 1: CYS in a nutshell

Section 2: How to participate in
standardisation activities

Section 3: CYS MC 11.10 Explosives
Atmospheres





CYS

SECTION 1: *CYS* IN A NUTSHELL

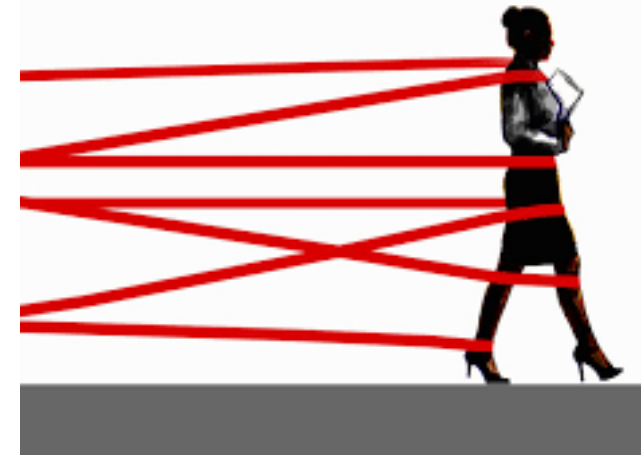


CYS

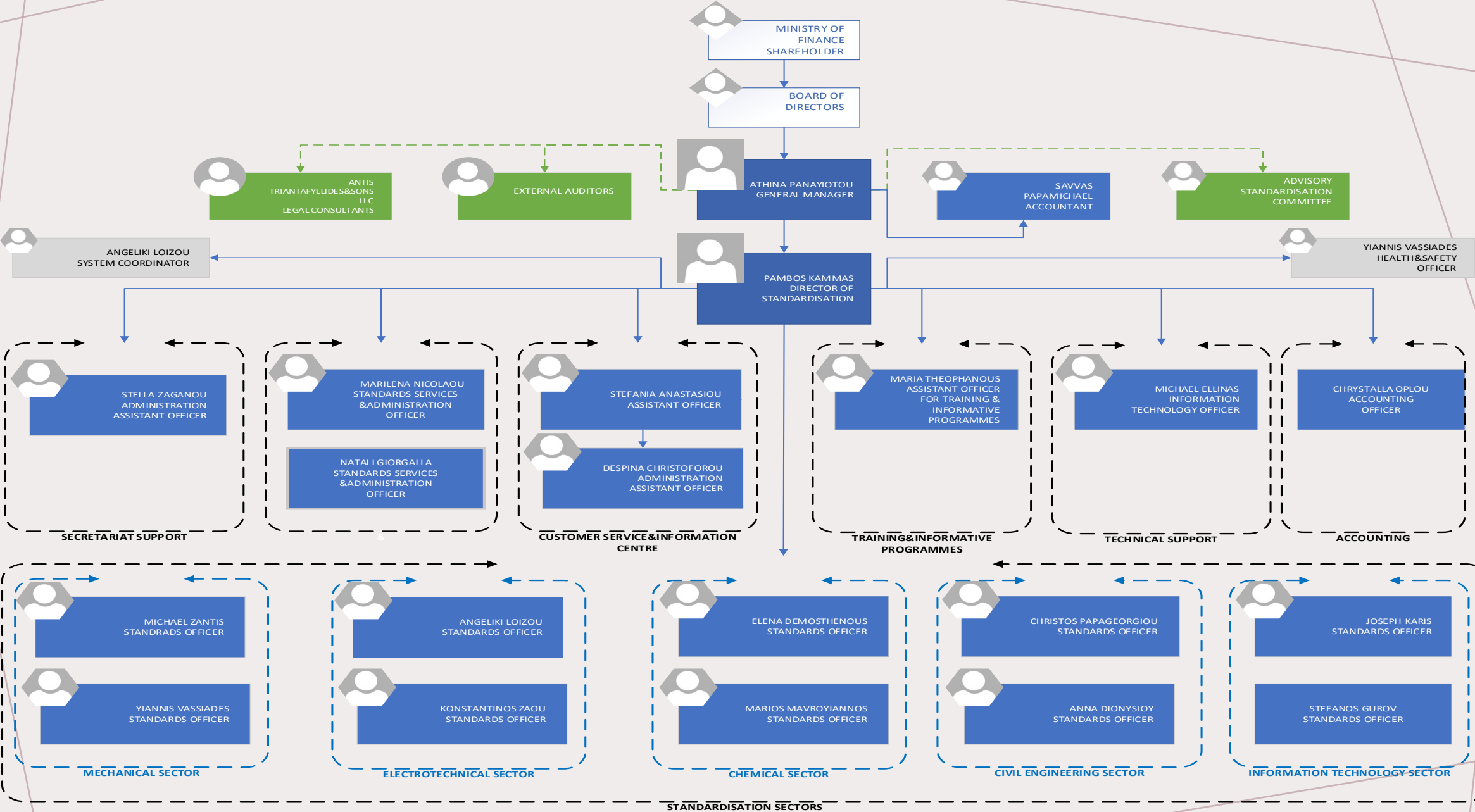
- Independent, autonomous organisation from the 1st of January 2005
- Operates under Private Law
- Recognized as the National Standards Body of Cyprus
- Only shareholder the Ministry of Finance

AUTONOMY OF CYS

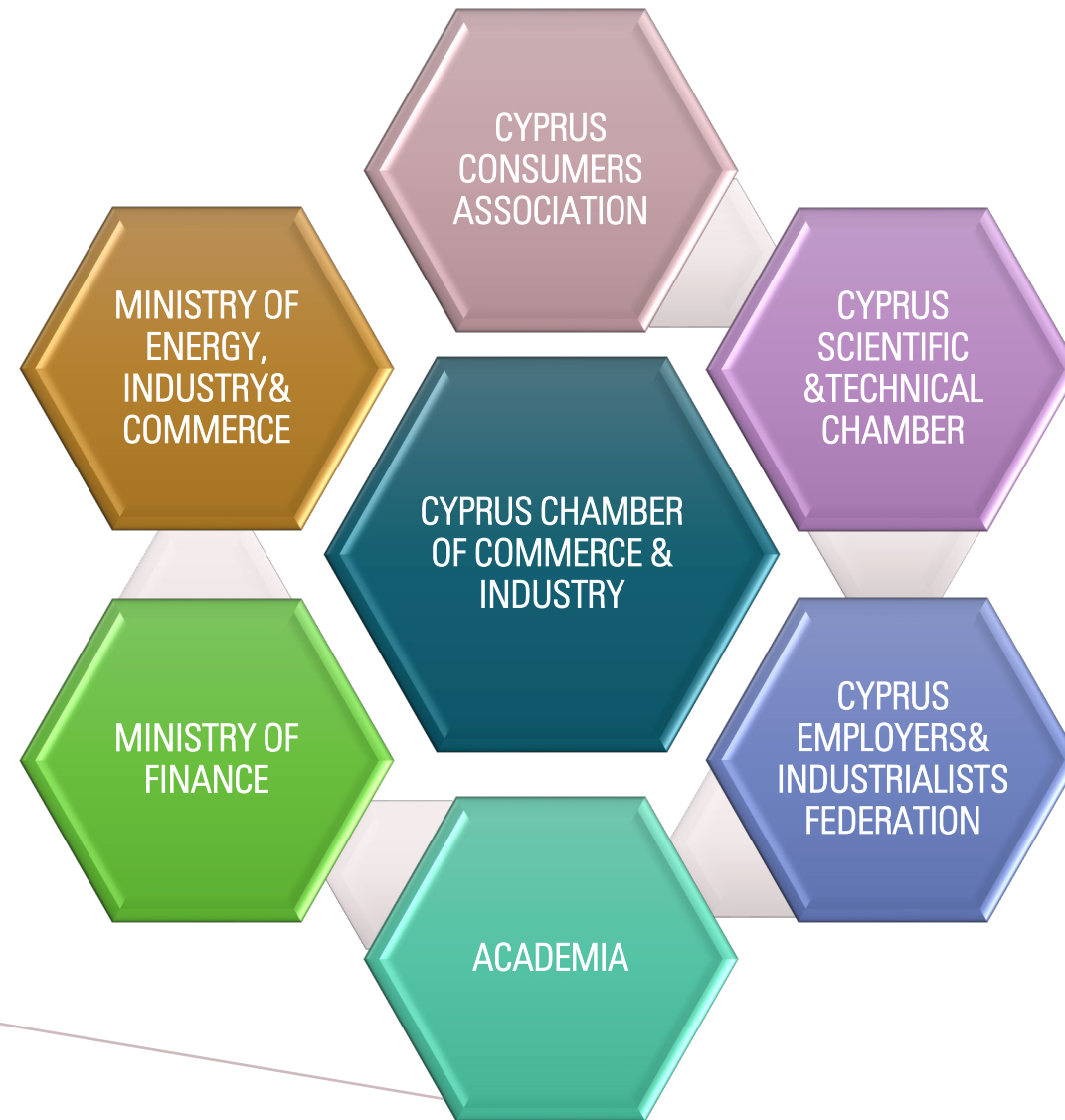
- 2005 – STATUS change – Metamorphosis
- 1975-2005
Public Body under full governmental control
- 2005-Today
Independent autonomous body under private law
 - More flexible
 - Better response
 - Less expensive to operate



ORGANISATIONAL CHART CYS



BOARD OF DIRECTORS



CYS MEMBERSHIP STATUS

EUROPEAN LEVEL

Full member of

- CEN



- CENELEC



- ETSI



INTERNATIONAL LEVEL

Full member of

- ISO



Associate member of

- IEC



Full member of

- ITU



MAIN ACTIVITIES OF CYS

PROMOTION

of European and International Standards within the industry and organisations in Cyprus

- Training & Informative Seminars
- Lectures
- Articles
- Press releases
- Visits

REPRESENTATION

of CYS in the European and International Standardisation Organisations



DEVELOPMENT

of national standards, specifications, schemes



CUSTOMER SERVICE AND INFORMATION CENTRE

Sales and Information Centre for

- European standards developed by CEN/CENELEC/ETSI
- International standards ISO/IEC
- National standards of other European countries for example ELOT, DIN, BSI

Subscription Schemes for public authorities and private organisations

Access to the bibliographic base **PERINORM** that contains 1,400,000 standards of 200 organisations publishing and developing standards





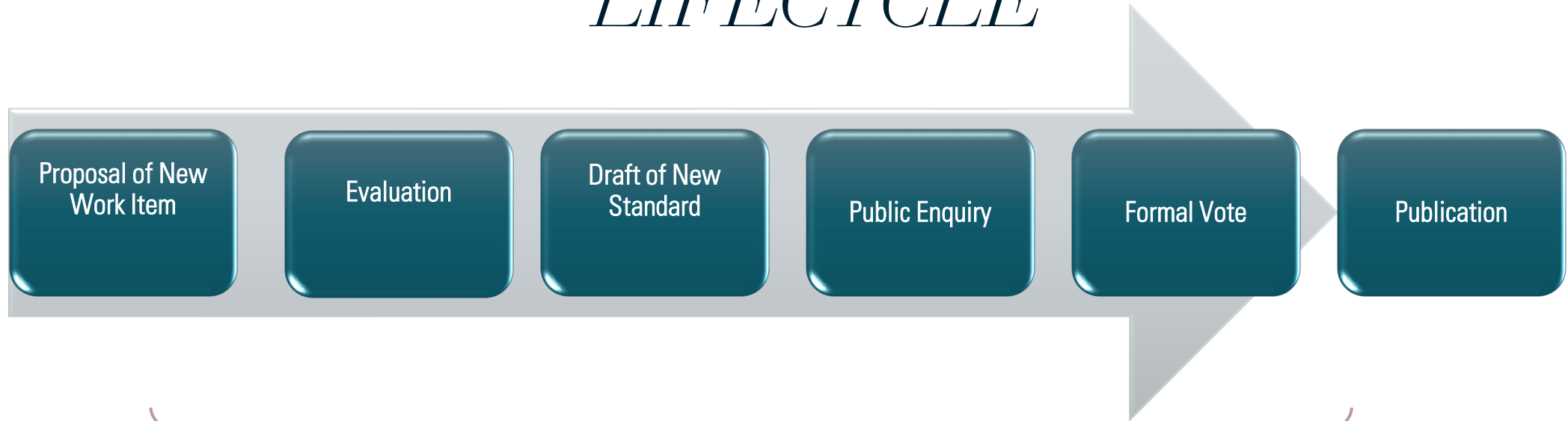
HOW TO PARTICIPATE IN STANDARDISATION ACTIVITIES

STANDARD

- means a **technical specification**, adopted by a recognized standardisation body, for repeated or continuous application with which compliance is not compulsory and which is one of the following:
 - “**international standard**” means a standard adopted by an international standardisation body
 - “**european standard**” means a standard adopted by a European standardisation organisation
 - “**harmonised standard**” means a European standard adopted on the basis of a request made by the Commission for the application of Union harmonisation legislation
 - “**national standard**” means a standard adopted by a national standardisation body



STANDARDS DEVELOPMENT LIFECYCLE



2 – 2.5 years

WAYS OF PARTICIPATION

MIRROR COMMITTEES

- Participate in CYS Mirror Committees
- Monitor the work of European and International Technical Committees
- Represent and develop the National position on European and International DRAFT Standards (Public Enquiry and Final Vote Stages)

NATIONAL TECHNICAL COMMITTEES

- Development of national standards, specifications etc

EUROPEAN/INTERNATIONAL TECHNICAL COMMITTEES

- Participates actively in the TC
- Votes the documents
- Attend the meetings of the TC

BASIC PRINCIPLES OF PARTICIPATION

Voluntary activity

Consensus

Transparency

Accessibility

Integrity

Efficiency

Coherence at European and International level

*MIRROR COMMITTEES IN
THE ELECTROTECHNICAL
SECTOR*

*ELECTROTECHNOLOGY
BUSINESS SECTOR*

4.01 Batteries

4.02 General Electrical
Technology

4.03 Electrical
Components

4.04 Electrical
Installations

4.05 Electrical
Machines, Devices,
Equipment, Instruments
& Apparatus

4.06 Electrical Motors
and Transformers

4.07 Electrical Safety
Equipment

4.08 Wires and Cables

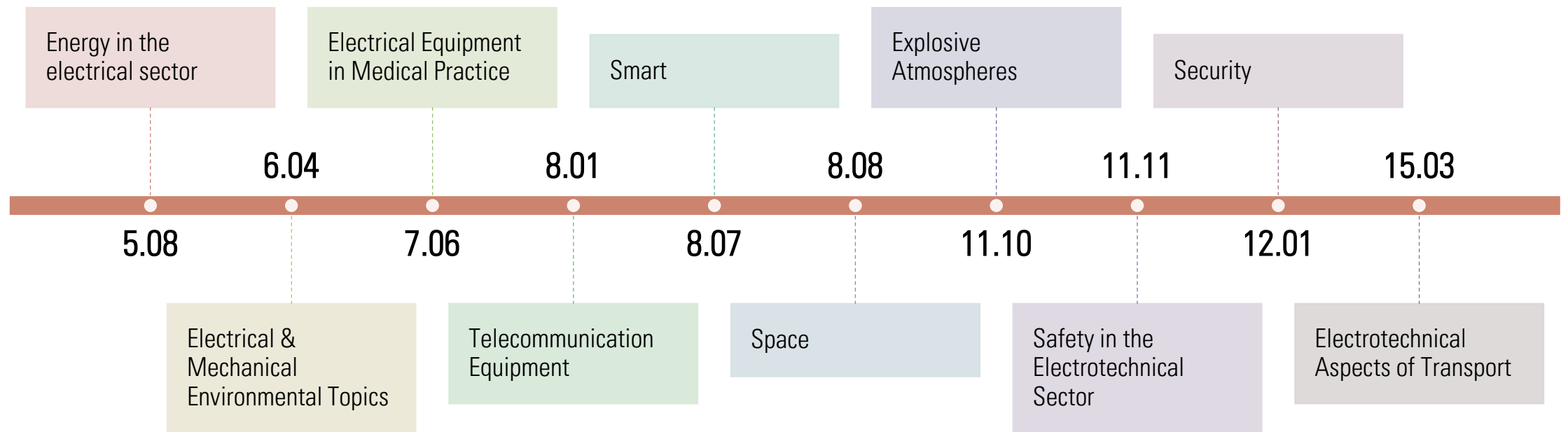
4.09 Power Systems


4.10 Electromagnetic
Compatibility

4.11 Light and Lamps

4.12 Switchgear and
Control gear

MIRROR COMMITTEES IN THE ELECTROTECHNICAL SECTOR





*SECTION 3:
CYS MC 11.10
EXPLOSIVES
ATMOSPHERES*

CYS MC 11.10

EXPLOSIVES

ATMOSPHERES

- CEN/TC 321 Explosives for civil uses
- CLC/SC 31-1 Installation rules
- CLC/SC 31-2 Flameproof enclosures
- CLC/SC 31-3 Intrinsically safe apparatus and systems
- CLC/SC 31-4 Increased safety
- CLC/SC 31-5 Apparatus type of protection
- CLC/SC 31-7 Pressurization and other techniques
- CLC/SC 31-8 Electrostatic painting and finishing equipment
- CEN/TC 305 Potentially explosive atmospheres - Explosion prevention and protection
- CLC/SC 31-9 Electrical apparatus for the detection and measurement of combustible gases to be used in industrial and commercial potentially explosive atmospheres
- CLC/SR 31G Intrinsically-safe apparatus
- CLC/TC 31 Electrical apparatus for potentially explosive atmospheres

CLC/TC 31 ELECTRICAL APPARATUS FOR POTENTIALLY EXPLOSIVE ATMOSPHERES

Scope:

To prepare and maintain European standards relating to equipment for use where there is a hazard due to the possible presence of explosive atmospheres of gases, vapours, mists or combustible dusts



STANDARDS

EN IEC 60079-0:2018

- Explosive atmospheres - Part 0: Equipment - General requirements

EN 60079-2:2014

- Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"

EN 60079-5:2015

- Explosive atmospheres - Part 5: Equipment protection by powder filling "q"

EN 60079-6:2015

- Explosive atmospheres - Part 6: Equipment protection by liquid immersion "o"



CEN/TC 305

POTENTIALLY EXPLOSIVE ATMOSPHERES - EXPLOSION PREVENTION AND PROTECTION

- **Scope:**
- To develop standards where necessary in the fields of:
 - test methods for determining the flammability characteristics (ignition, propagation, explosion effects, etc.) of substances;
 - equipment and protective systems for use in potentially explosive atmospheres and equipment and systems for explosion prevention and protection.



STANDARDS

- EN 1127-1:2019
 - Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology
- EN 14373:2021
 - Explosion suppression systems
- EN 14460:2018
 - Explosion resistant equipment
- EN 14491:2012
 - Dust explosion venting protective systems





IECEX

- IECEx is the IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres. It uses quality assessment specifications that are based on International Standards prepared by the International Electrotechnical Commission (IEC).

IECEx schemes

Certification Bodies (ExCBs) - Certified Equipment Scheme

Certification Bodies (ExCBs) - Certified Service Facilities

Certification Bodies (ExCBs) - Personnel Competencies

Certification Bodies (ExCBs) - Conformity Mark Licensing

IECEx Recognised Training Providers (RTPs)

THANK YOU

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