National Standardization System for Telecommunications & ICT

InfoCom Cyprus Conference 2019

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Evolvement

1975 – 2005
- **Public Body (MCIT)**
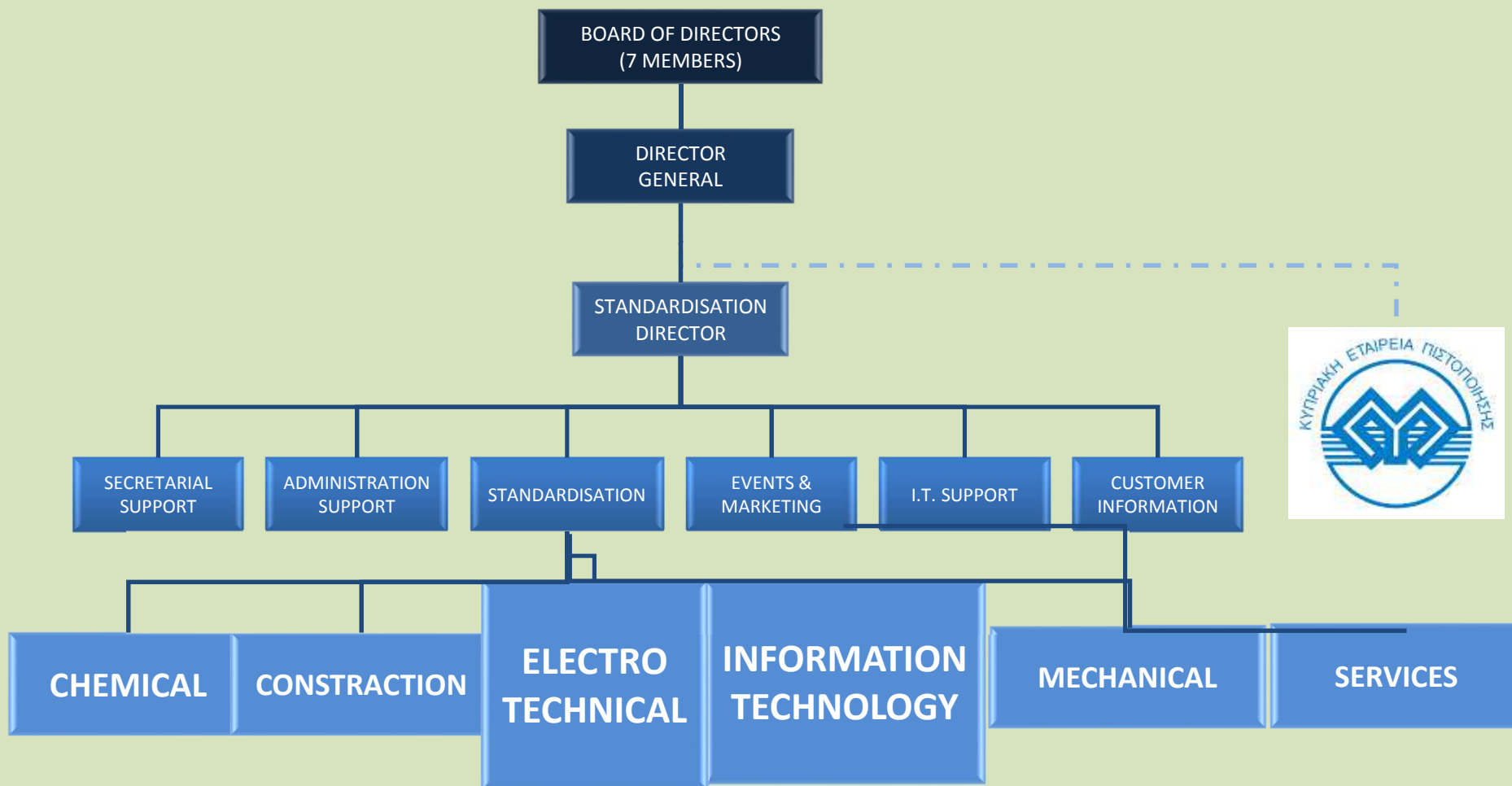- **Under government control**

2005 – Today
- **Independent Body**
- **Under Private Law**
- **Cyprus National Standards Body**

- **More flexible**
- **Better response**
- **Less expensive to operate**

ORGANIZATIONAL CHART

BOARD OF DIRECTORS
(7 MEMBERS)

DIRECTOR
GENERAL

STANDARDISATION
DIRECTOR

SECRETARIAL SUPPORT	ADMINISTRATION SUPPORT	STANDARDISATION	EVENTS & MARKETING	I.T. SUPPORT	CUSTOMER INFORMATION

CHEMICAL | **CONSTRACTION** | **ELECTRO TECHNICAL** | **INFORMATION TECHNOLOGY** | **MECHANICAL** | **SERVICES**

Main Activities of CYS

➢ Managing the Standardisation System in Cyprus

➢ Informative lectures & seminars

➢ Training seminars/courses

➢ Visits/meetings with the industry

➢ Publications

➢ Articles (Mass Media)

What are standards?

A document established by consensus and approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.' –
ISO/IEC Guide 2:1996

Characteristics of Standards

Voluntary and Market Driven – The decision to develop new standards is driven by Markets or Mandates issued by the European Commission and other official Bodies of EU.

Consensus Based – All standards are subject to dialogue from all Concerned Parties.

Approved by a recognized Body – a recognized European or International standards body such as CEN, CENELEC ETSI , ISO e.t.c..

Standards for Telecommunications and ICT

ICT Standards Consist Series of Requirements :

- **Equipment Behavior**: Can be observed at a defined, accessible interface, such as protocol or service.

- **Architectures**: Communication and network architectures specifying the functional or logical environment.

- **Physical Characteristics**: Dimensions, voltage, coulour.

- **Policy Requirements on operations and Management Practices** : Related to the Process of Issuing Qualified Certificates

- **Test Specifications**: test demonstrating implementation conforms to a standard or interoperability tests.

Benefits of Standards

❑ Addressing needs for interconnection
and interoperability for open markets, where mobile
users can 'mix and match' equipment and services

❑   Referenced by regulators and legislators for protecting
user and business interests, and in support of
government policies.

❑ Important for ensuring safety, reliability and
environmental care

Benefits of Standards

- Open **market access**
- Provide **economies of scale**
- Encourage **innovation**
- Increase **awareness** of technical developments and initiatives

A good example of the power of standardization is the **GSM™** mobile communication technology and its successors (**3G, 4G, 5G**...), truly global phenomena, in which ETSI has and is still playing a leading role.

Smart Cards, **DECT™**, **TETRA**, **Short Range Radio**, **medical implants**, **electronic signatures**....

Standards for Telecommunications and ICT

European Committee for Standardization

European Committee for Electrotechnical Standardization

European Telecommunication Standards Institute

International Standards Organization

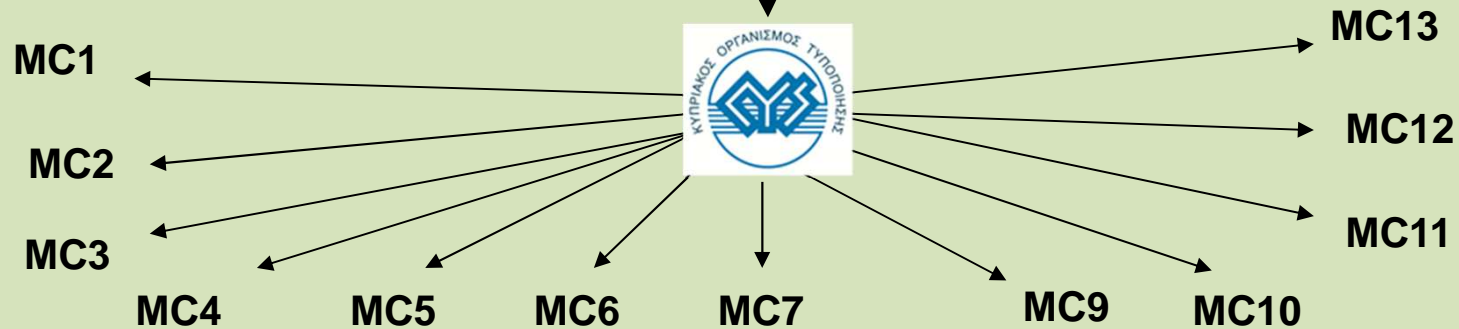**International Electrotechnical Committee**

International Telecommunications Union

European Standards Organizations

CENELEC

cen

ETSI
Πληροφορική
Τηλεπικοινωνίες

<u>**Over 300 European Committees on ICT**</u>

National Mirror Committees

MC1

MC2

MC3

MC4   MC5   MC6   MC7   MC9   MC10

MC13

MC12

MC11

MC 07 – ICT and Telecom

CYS Mirror Committees

MC 1	Construction Products & Civil Engineering
MC 2	Mechanical Engineering
MC 3	Healthcare
MC 4	Health & Safety
MC 5	Heating, Cooling & Ventilation
MC 6	Transport & Packaging
MC 7	Telecommunication & Information Technology
MC 9	Chemicals & Environment
MC 10	Gas
MC 11	Food & Biotechnology
MC 12	Services
MC 13	Electrical & Electronic Equipment Electrical & Electronic Medical Devices

Mirror Committees

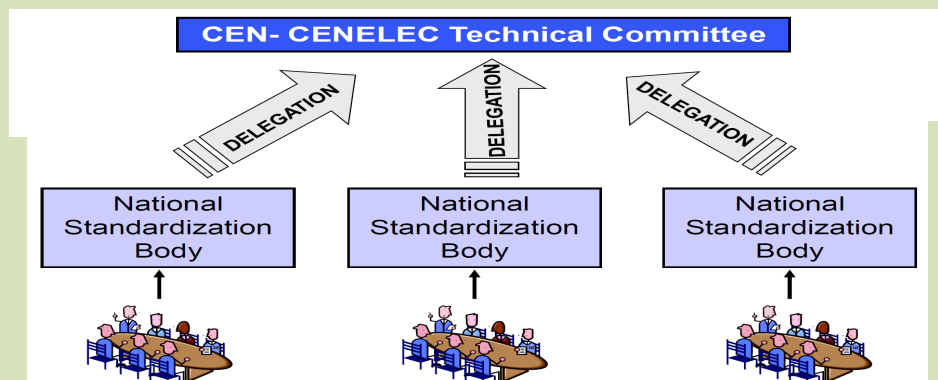**MC 7** | **Information Technology & Telecommunication**

Cyprus National Committees observe the International and European Standards for:

➢ Telecommunications

➢ Online Reporting for Gambling Operators

➢ Future Planning for a National Mirror Committee for Blockchain Technology!!!!!!

Mirror Committees

➤ NSBs set up Mirror Committees that monitor the work of European and International Technical Committees.

➤ The National experts inside 'mirror committees' in CYS represent and develop the National position on European and International DRAFT Standards. (Professional associations, Telecom Companies, Departments of Electronic Communications, Ministries, Individual Experts).

CEN- CENELEC Technical Committee

DELEGATION · DELEGATION · DELEGATION

National Standardization Body · National Standardization Body · National Standardization Body

Standards for Telecommunications and ICT

Administrations
Other Governmental Bodies
National Standards Organizations✓ ✓ ✓
 Operators – Manufacturers -Users
Service Providers
Research Bodies
Universities
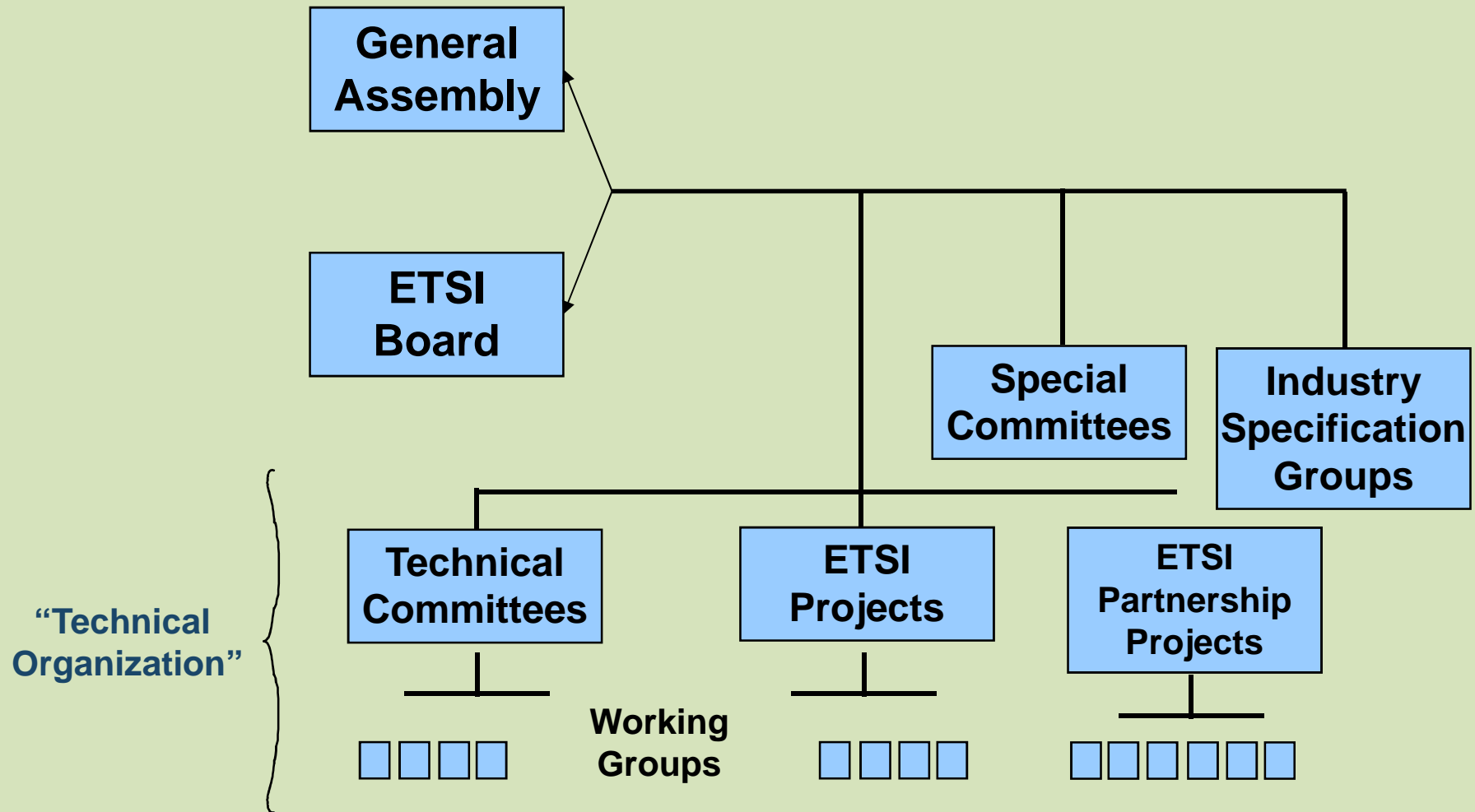Consultancy Companies Partnerships Others

Standards for Telecommunications and ICT

Cyprus Organization for Standardization as a Full Member of ETSI has the right to participate in the work of ETSI by attending meetings (with the right to vote)

 i) General Assembly,

ii) Special Committees,

iii) Technical Bodies Established by ETSI

iv)Industry Specification Groups (ISG) upon signature of the relevant ISG Member Agreement.

Standards for Telecommunications and ICT

ETSI's Technical Committees

- Telecoms network technologies
- DSL, Broadband, Next Generation Networks
- Cable distribution systems
- Power line telecommunications
- Next Generation Protocols
- QoS, Speech quality and speech recognition
- Intelligent Transport Systems
- Security algorithms, Quantum Key Distribution
- Electronic signatures, lawful interception, smart card
- Emergency Telecommunications
- IoT& M2M Communications

ETSI Standardization Work

- Radio technologies
- Mobile technologies
  GSM, UMTS, LTE, 5G, Railway communications…
- private/professional land mobile radio systems
- Digital Enhanced Cordless Telecommunications (DECT)
- TETRA & other public safety systems
- Spectrum matters & electromagnetic compatibility
- Wireless Local Area Networks
- Broadcast systems
- Satellite communications
- Short range devices
- Reconfigurable radio Systems
- Aeronautical and marine radio
- eHealth and Wireless medical devices
- Body Area Networks

Industry Specific Groups (ISG's)

- ✓ Augmented Reality Framework
- ✓ Experiential Networked Intelligence
  IPv6 Integration
- ✓ Millimetre Wave Transmission
- ✓ Network Functions Virtualization
- ✓ Next Generation Protocols
- ✓ Permissioned Distribute Ledgers (BlockChain)
- ✓ Zero Touch Artificial Intelligence

Standards for Telecommunications and ICT

ETSI Technical Specifications (TSs)

ETSI Technical Reports (TRs)

ETSI Group Specifications (GSs)

ETSI Group Reports (GRs)

>   Approved by the TC, Project or Group concerned

Fast to publish

ETSI Standards (ESs)

ETSI Guides (EGs)

>   Approved by the full ETSI Membership

>   Web-based voting tool

Fast + approved by all members

European Standards (ENs)

Harmonized Standards (HS)

>   Approved by National Delegations, through the National Standards Organizations (NSOs)

>   Web-based voting tool

Wide, formal acceptance

Standards for Telecommunications and ICT

Harmonized Standards are European Standards with a special status.

In Europe, Harmonized Standards, essentially published by CEN, CENELEC and ETSI, allow manufacturers to place their products on the market with a presumption of conformity. This process requires that the Harmonized Standards are published in the Official Journal of the European Union (OJEU)

❑ Example : Radio Equipment Directive (RED), applicable from 13 June 2016

Any provider that wants to place a transmitting or receiving radio equipment on the European market and operate it by using the radio spectrum must meet the requirements of the relevant directives and regulations. (ETSI Standards are supporting the RED Directive).

Standards for Telecommunications and ICT

Harmonized Standards for :

❑ **On the accessibility of the websites** and mobile applications of public sector bodies. Directive (EU) 2016/2102

❑ **Intelligent Transport Systems** (ITS) in urban areas in support of Directive 2010/40/EU

❑ **For privacy and personal data protection management** . Directive 95/46/EC

❑ Production of EN's under the **Single European Sky Interoperability Regulation** (i.e. in civil aviation). These Ens are produced in co-operation with EUROCAE (the European Organization for Civil Aviation Equipment)
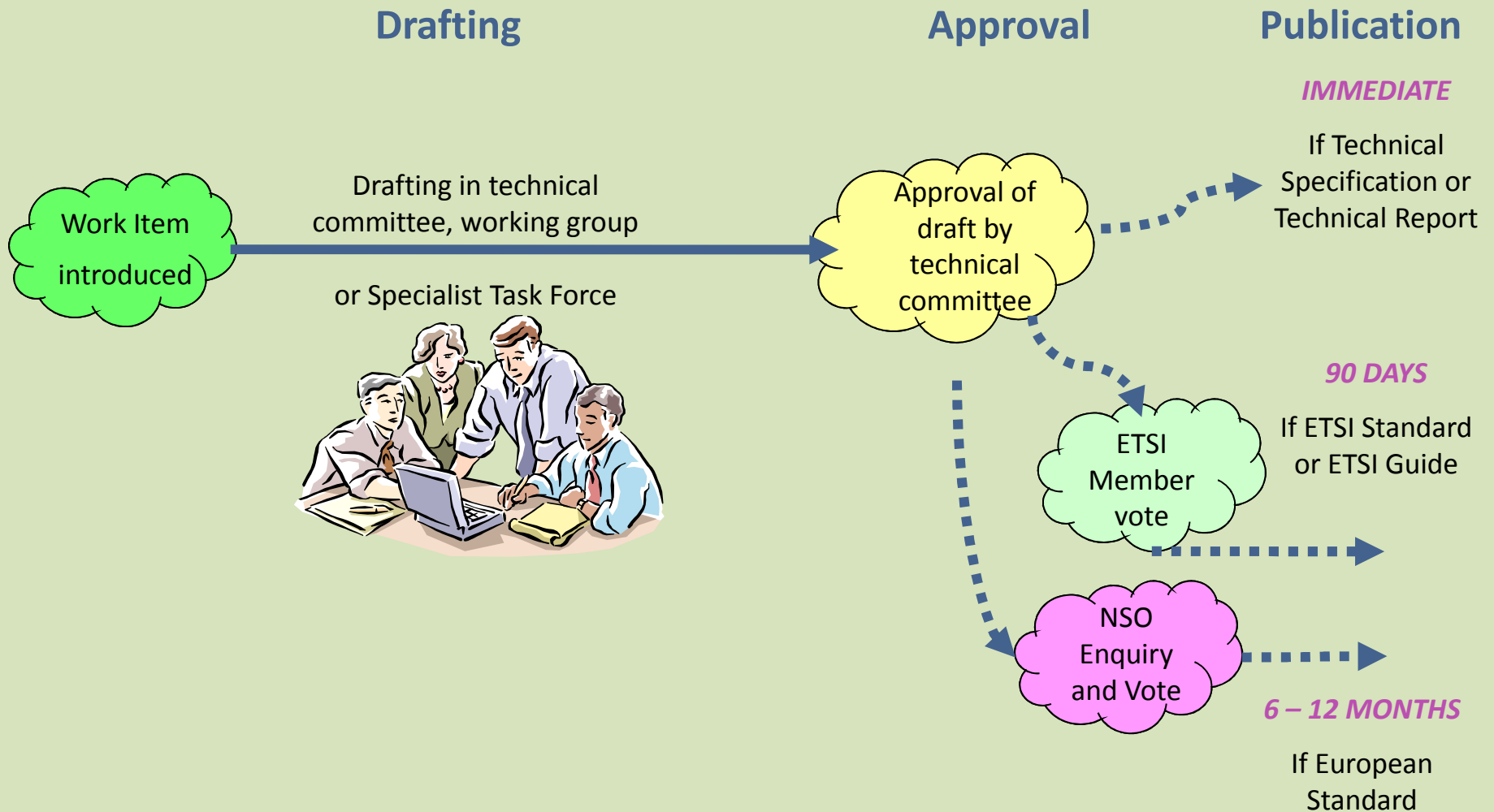
REGULATION (EU) No 1025/2012 on European Standardization

National Standardization Bodies and European standardization Organisations should facilitate accessible information on their activities through the promotion of the use of information and communication technologies (ICT) in their respective standardization systems, for example by providing to all relevant stakeholders an easy-to-use online consultation mechanism for the submission of comments on draft standards and by organizing virtual meetings, including by means of web conferencing or video conferencing, of technical committees.

https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:316:0012:0033:EN:PDF

The ETSI standards process

Drafting   **Approval**   **Publication**

IMMEDIATE

Work Item introduced

Drafting in technical committee, working group

or Specialist Task Force

Approval of draft by technical committee

If Technical Specification or Technical Report

90 DAYS

ETSI Member vote

If ETSI Standard or ETSI Guide

NSO Enquiry and Vote

6 – 12 MONTHS
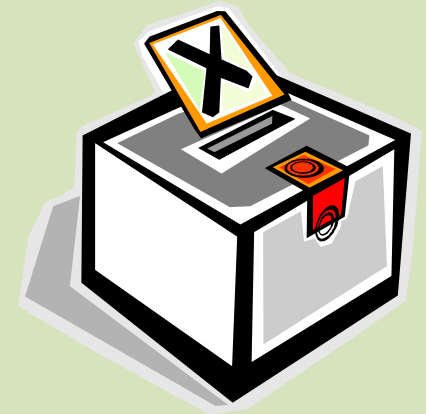
If European Standard

Public Enquiry of EN Standards

❑ A PE is a national consultation undertaken by each NSO in its country to evaluate the likely acceptance of an EN (HS or non-HS).

❑ The PE period takes (90 days) may be extended by ETSI on justified request from an NSO.

❑ The comments, if any, resulting from a PE may be of technical or non-technical nature

❖ Industry demands that the ENs be produced in a more timely fashion. The target is to reduce the time for AP from 90 days to 60 by 2020.

Voting in Technical Bodies

❑ Voting is Executed via an ETSI Online Voting Application and is fully monitored by CYS

❑ Full and Associate Members only
❑ 30 days notice
❑ 71% majority - Success = 71% of weighted votes in favour

❑ One <weighted> vote per member
   irrespective of number of delegates from that member
❑ No proxy votes
❑ No quorum stipulated
❑ vote splitting is not permitted

National weightings

GERMANY	29		SWITZERLAND	10
UNITED KINGDOM	29		SLOVAK REPUBLIC	7
FRANCE	29		DENMARK	7
ITALY	29		FINLAND	7
SPAIN	27		NORWAY	7
POLAND	27		IRELAND	7
ROMANIA	14		SERBIA	7
NETHERLANDS	13		CROATIA	7
RUSSIA	12		LITHUANIA	7
TURKEY	12		LATVIA	4
GREECE	12		SLOVENIA	4
PORTUGAL	12		GEORGIA	4
BELGIUM	12		ESTONIA	4
CZECH REPUBLIC	12		CYPRUS	4
HUNGARY	12		LUXEMBOURG	4
UKRAINE	10		MALTA	3
SWEDEN	10		ICELAND	3
AUSTRIA	10		BOSNIA & HERZEGOVINA	3
BULGARIA	10		FYR OF MACEDONIA	3

Participating in TB's and ISG's

Participation in ETSI Technical Bodies and Industry Specific Groups is achievable only in direct contact with Cyprus Organization for Standardization and can be :

1) Electronically: connected with ETSI online tools where you can follow the standardization work of the TB's and ISG's or any other special Committee.

2) Participation face to face at the Plenary Meetings or Working Groups of the TB and ISG's .

Thank for your Attention!!!