



TRAINING CEN & CENELEC NEWLY APPOINTED TECHNICAL BODY OFFICERS

Understanding the CENELEC standardization process



Ingrid Soetaert & Catherine Vigneron

CCMC Standards Development



Historical background



Lugano Agreement
(1991)

**CENELEC and IEC:
30 years partnership**



Dresden Agreement
(1996)

**CENELEC 80%
aligned on IEC**



Frankfurt Agreement
(2016)

Who is CENELEC

3 recognized European Standardization Organizations

- ▲ CENELEC – CEN – ETSI

CENELEC

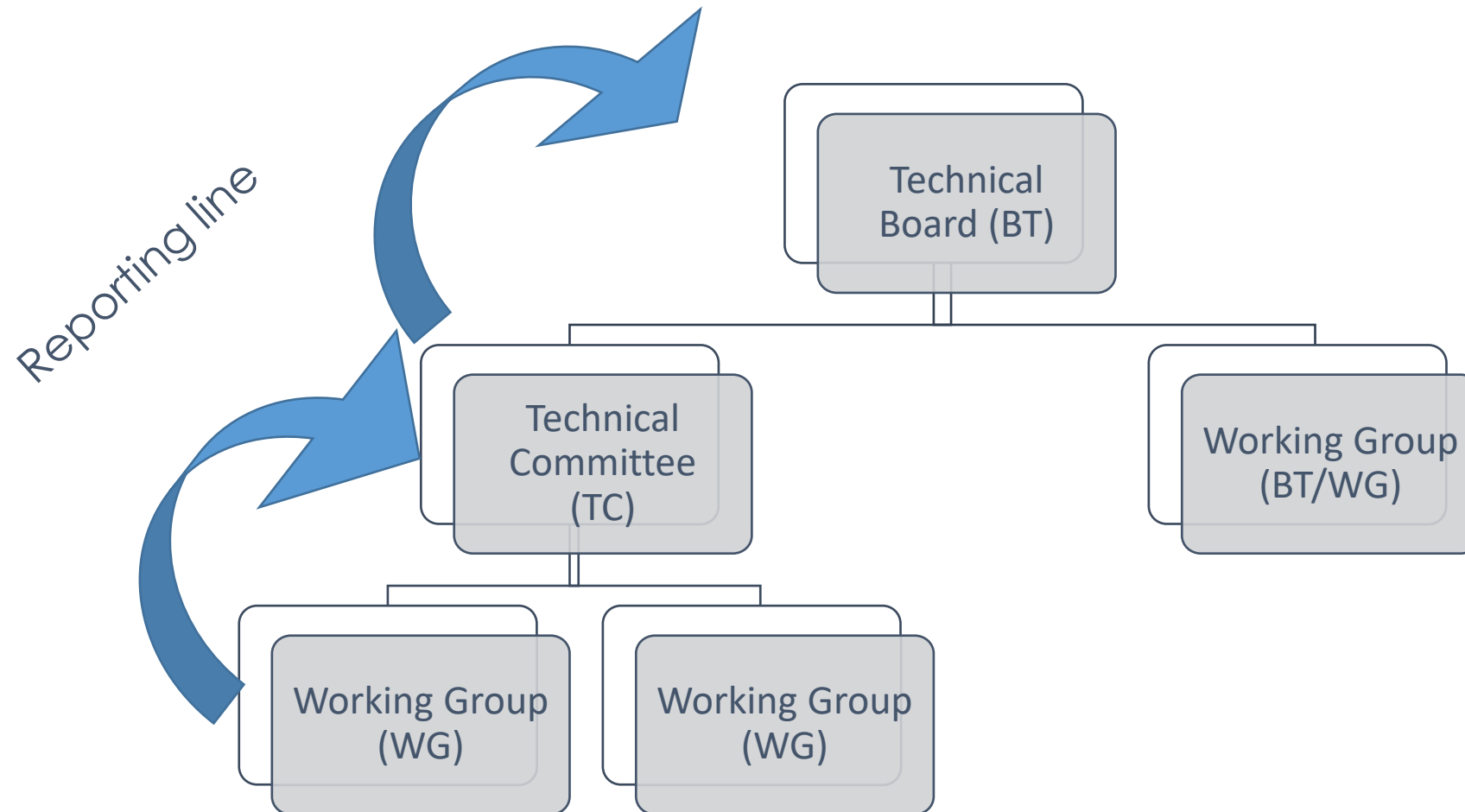
- ▲ 34 National Committees (NCs)
 - European Economic Area
 - All IEC members
- ▲ Committed to working first at IEC level
- ▲ Implementing IEC Standards as CENELEC Standards (EN IEC)



1. Roles and Responsibilities of BT, TCs, WGs
2. From New Work Item to Publication
3. Day to day management of Frankfurt Agreement
4. Citations of Harmonized Standards in OJEU
5. CENELEC BOSS and other useful information

1. Roles and responsibilities of BT, TCs and WGs

The three-decision layers at technical level



The three-decision layers at technical level

Technical Committee
TC

Composition:

- ▶ TC Chairperson + TC Secretary + National Delegations (national position, voting right) + European Partners (observers, no voting right)

Role:

- ▶ Responsible for the timely development of deliverables
- ▶ Timely execution of standardization request deliverables (incl. support when Standardization Request development)
- ▶ Always work along the standardization principles: transparency, openness, consensus-building

Communication between TC Secretariat and with CCMC (PM) is key!!

→ TC secretariat always on top of the TC's work programme

Technical Committee composition



CEN-CENELEC Guide 25
'The concept of Partnership with European organisations and other stakeholders'

CENELEC Members
Max. 3 delegates -
Vote

European Partners (including Annex III)
Observer – **No vote**

IEC
Observer – **No vote**

Affiliates Partner St. Bodies
Observer – **No vote**

European Commission/EFTA
Observer – **No vote**

Liaison officers from other TCs
Observer – **No vote**

TC Chairperson

- ▶ Appointed by CLC/BT
- ▶ Neutral
- ▶ Presides meetings and seeks consensus
- ▶ Interface with CCMC (strategic directions, specific issues,...)
- ▶ Ensures coordination with other TCs

TC secretary

- ▶ Appointed by NC holding the secretariat
- ▶ On top of CLC/TC work programme
- ▶ Ensures that TC works efficiently & within timelines
- ▶ Prepares and distributes documents (via IT Tool)
- ▶ Is aware of relevant CLC/BT decisions and provide inputs when needed
- ▶ Ensures coordination with other TCs
- ▶ In case of Standardization Requests, is responsible for preparing reports



Before plenary

- ▶ Circulates agenda (2 months before) and documents for discussion (4 weeks) - templates available on BOSS
- **New normal:** [guidelines](#) developed
- TC Work programme available on Projex-Online
- ▶ 'ERAS' attendance list to be used

After plenary

- ▶ Prepare report (template on BOSS) to be sent to CCMC (dataservice@cencenelec.eu) within 8 weeks → circulated to CLC/BT by correspondence

Use of CIV

- ▶ The Committee Internal Voting (CIV) is the IT tool, available on CENELEC voting portal, providing the possibility for TC Secretaries to launch ballots by correspondence for any kind of consultations (formal and informal).

Technical Committee Report to BT

- ▶ TC channel to Technical Board
- ▶ Template to be used → to be sent to dataservice@cencenelec.eu

7 Systematic review of standards

- CLC/TC ... recommends **BT** to confirm the following standard(s) for another 5 years:

Reference	Title	PR=

- CLC/TC ... decided to revise the following standard(s) and will request (a) NWI:

Reference	Title	PR=

- CLC/TC ... recommends **BT** to withdraw the following standard(s):

Reference	Title	PR=

8 Review of liaisons

Please list not only the liaisons with technical bodies of the ESOs but also any other ~~observership~~

9 Additional Remarks from Secretariat:

10 Questions of principle requiring decision of BT:

Technical Committee Report to BT

TECHNICAL BOARD

BT by correspondence	Agenda item:	5.2.21
For decision	Issue date:	2023-06-28
	Deadline:	2023-08-08

SUBJECT

CLC/TC 7X **Overhead electrical conductors**

Report to BT

BACKGROUND

The attached document reports on the outcomes of the CLC/TC 7X plenary meeting held online on 2023-03-01 (see Annex 1).

In addition, the present document includes a database extract reflecting the activities of CLC/TC 7X (see Annex 2) and an overview of its Working Groups (see Annex 3).

The following topics require particular BT attention:

Systematic review of standards

CLC/TC 7X recommends BT to confirm the following standards for another 5 years:

- EN 50182:2001 'Conductors for overhead lines - Round wire concentric lay stranded conductors' (PR=63)
- EN 50326:2002 'Conductors for overhead lines - Characteristics of greases' (PR=5749)

CLC/TC 7X recommends BT to withdraw the following standards:

- EN 50183:2000 'Conductors for overhead lines - Aluminium-magnesium-silicon alloy wires' (PR=62)

Note: This standard is not normatively referred to in other standards.

PROPOSAL(S)

BT noted the report of CLC/TC 7X 'Overhead electrical conductors' (meeting of 2023-03-01) and approved its work program annexed to the report.

BT confirmed the following standards for another 5 years:

- EN 50182:2001 'Conductors for overhead lines - Round wire concentric lay stranded conductors' (PR=63);
- EN 50326:2002 'Conductors for overhead lines - Characteristics of greases' (PR=5749).

BT decided to withdraw the following standards:

- EN 50183:2000 'Conductors for overhead lines - Aluminium-magnesium-silicon alloy wires' (PR=62);
- EN 50189:2000 'Conductors for overhead lines - Zinc coated steel wires' (PR=5636);
- EN 60889:1997 'Hard-drawn aluminium wire for overhead line conductors' (PR=6649);
- EN 61232:1995 'Aluminium-clad steel wires for electrical purposes' (PR=5048).

2023-06-20 – FM

The three-decision layers at technical level

Working Groups
WG

Working Groups

Established by the Technical Committee (short term task)

Composition: Individual experts appointed by the NCs

Role:

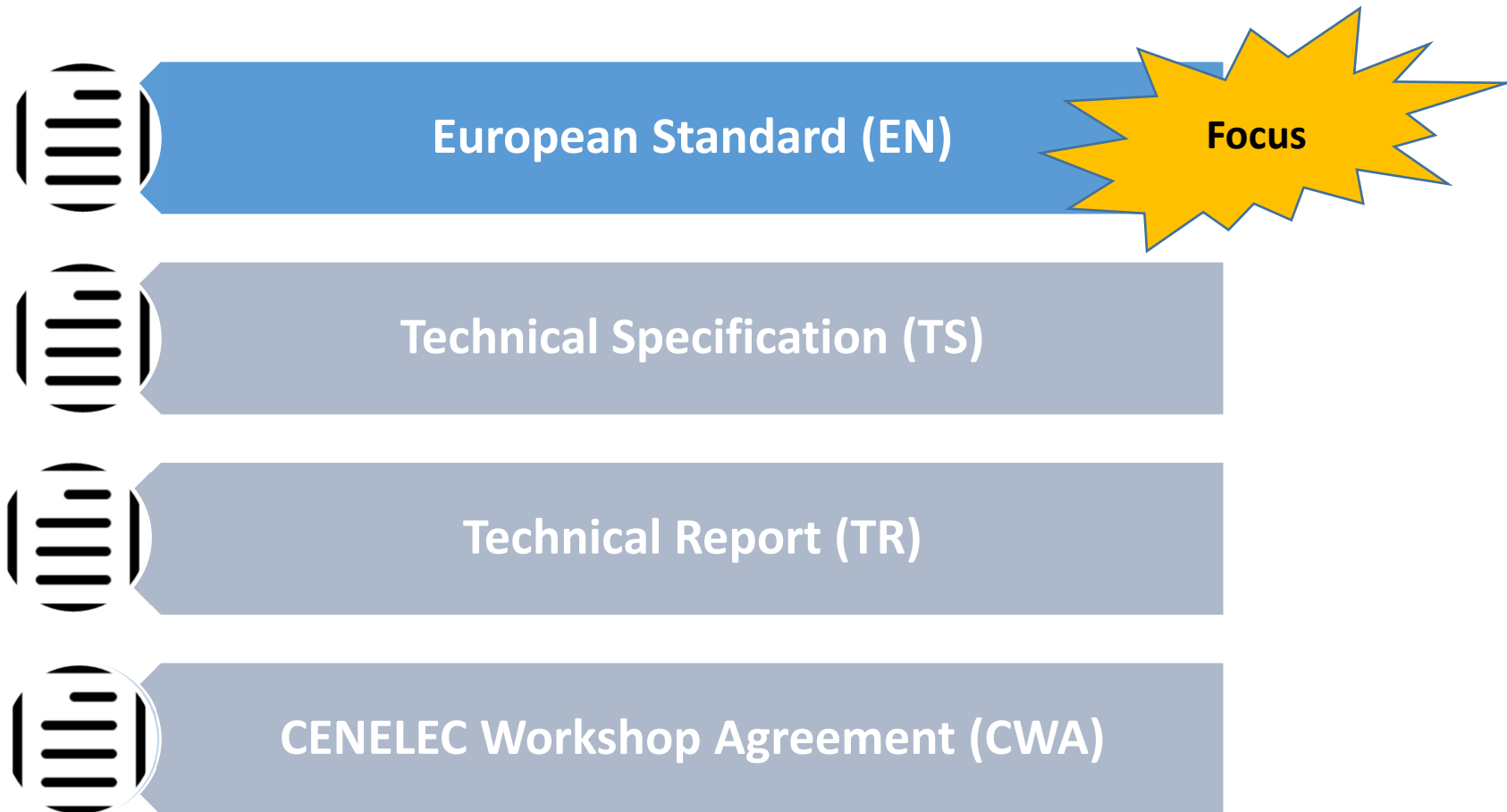
- ▶ Responsible for drafting the deliverables + to send to TC for
- ▶ Seeks support from the parent body (if needed)
- ▶ Ensures that WG experts know rules and procedures
- ▶ Actively progresses work and reports regularly to TC

Efficient and smooth cooperation between TC (WG) experts, delegates and observers contributing to the development of standards is fundamental:

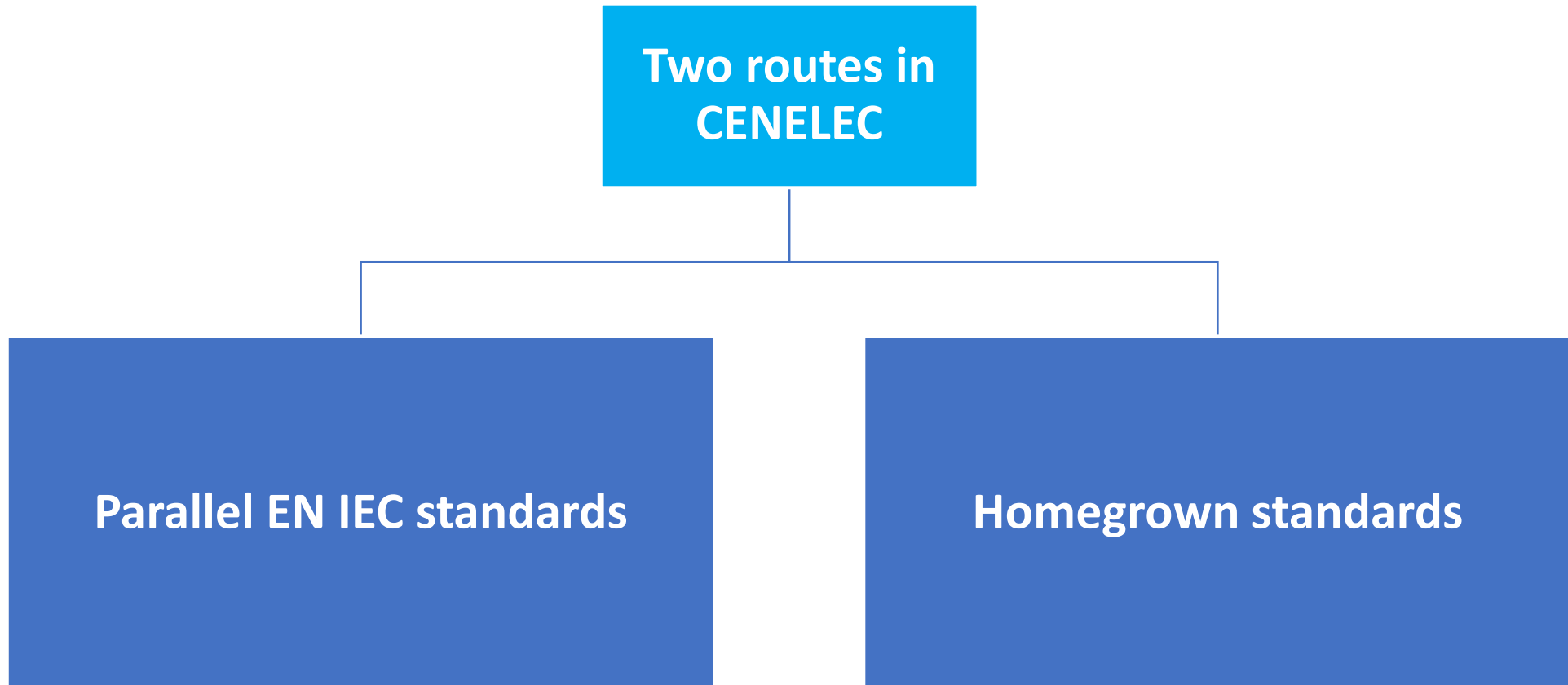
- ▶ Code of Conduct for experts participating in CEN and CLC (technical work) – [here](#) → *raises awareness on Internal Regulations and Guides, especially the Policy on Patents and the provisions regarding competition law*
- ▶ Best practices for improving effectiveness of WG meetings - [here](#) → *advices and suggestions to WGs convenors on what should be done before, during and after meetings*

2. From New Work Item (NWI) to publication

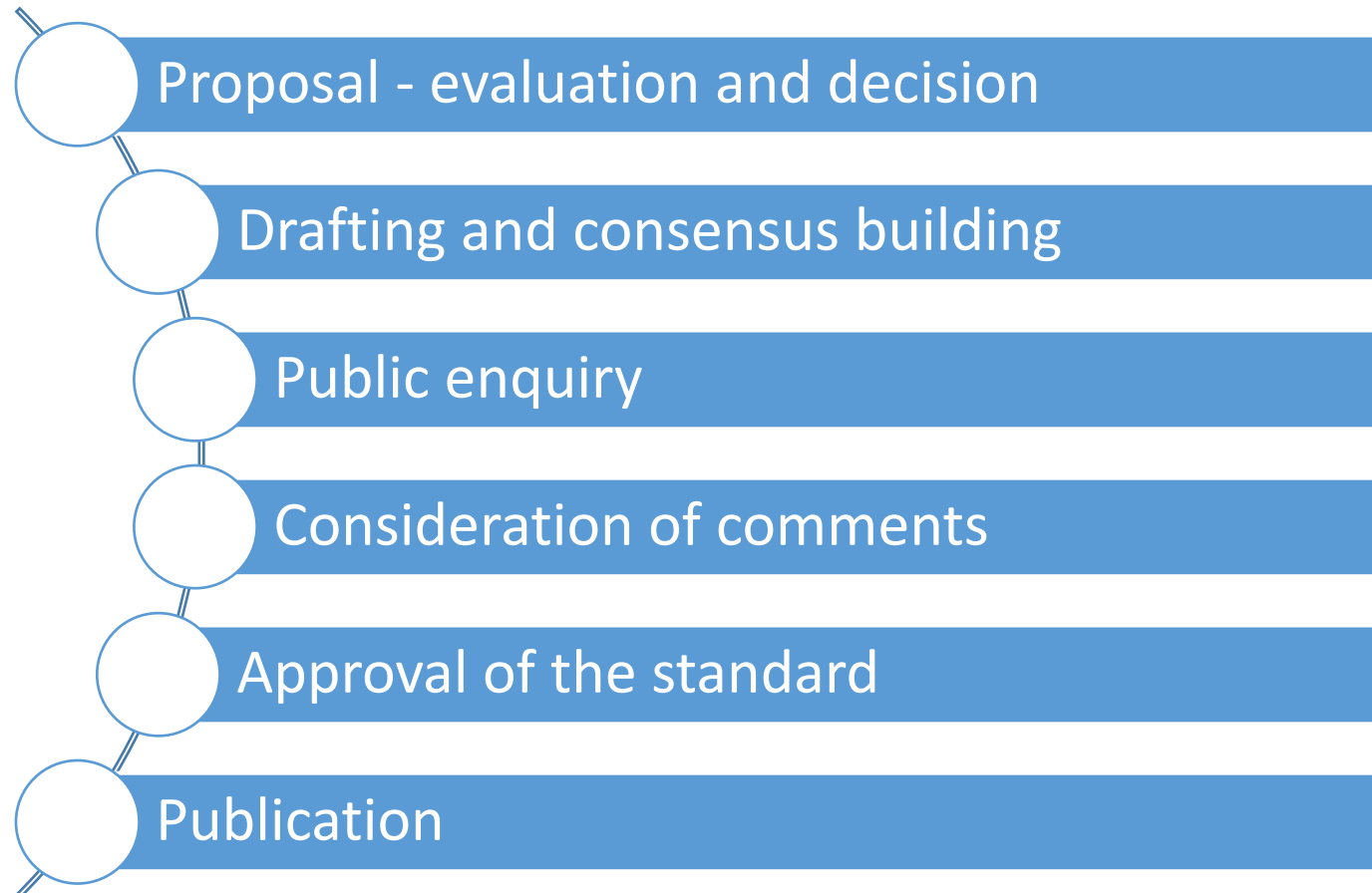
Deliverables

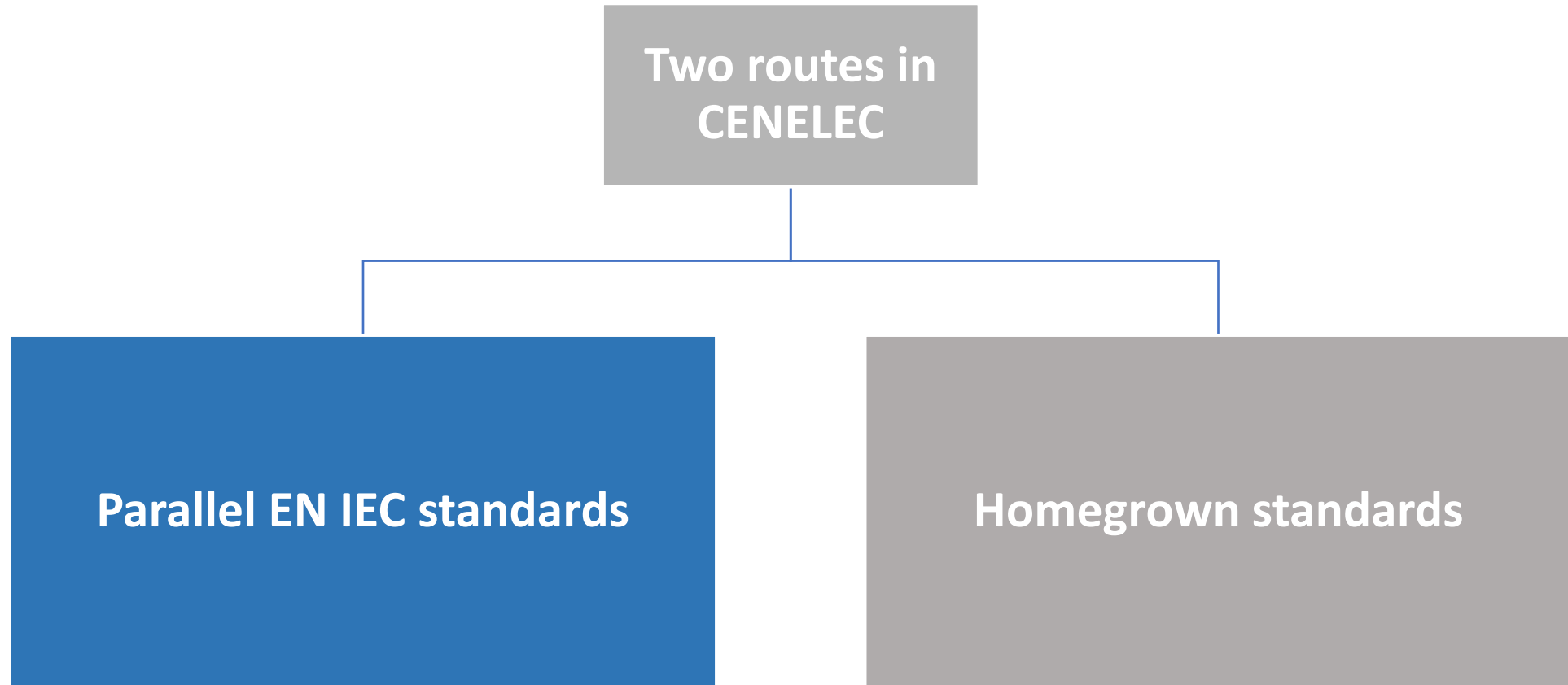


Standards development



Standards development

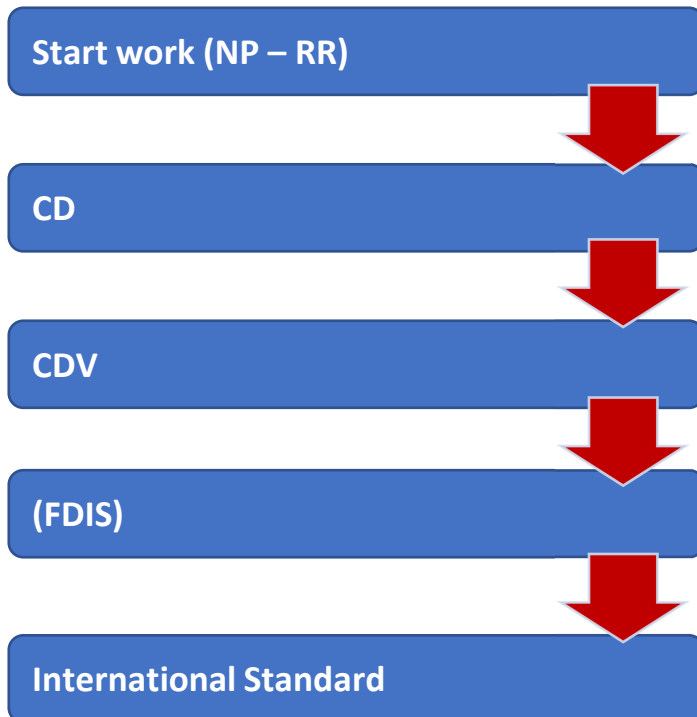




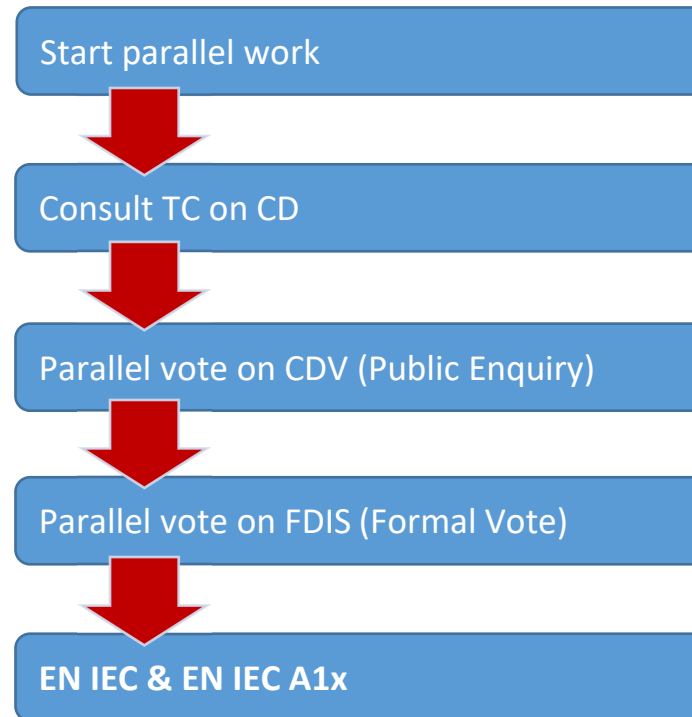
Standards development

Parallel work between IEC and CENELEC

IEC



CENELEC



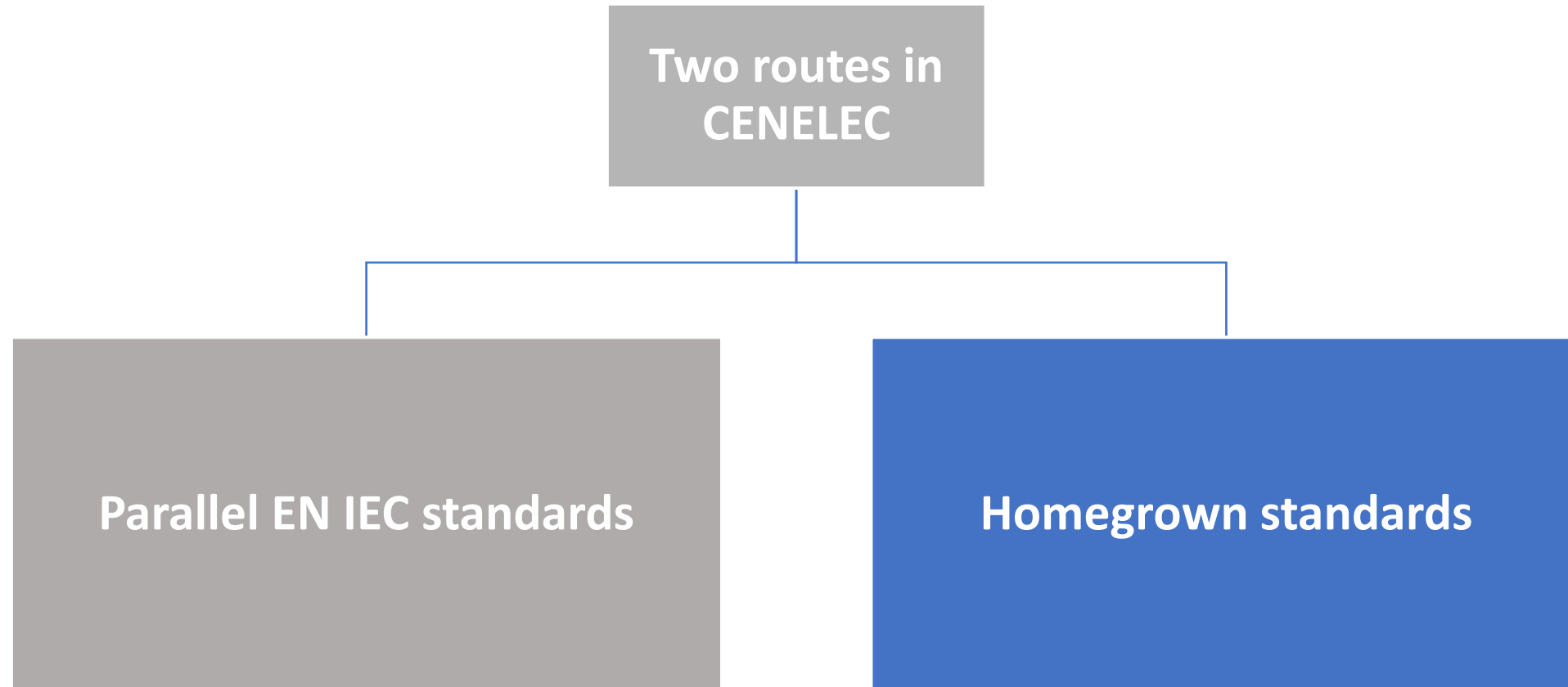
NWI automatically created in the CLC/TC work programme

CLC/TC secretary: monitoring the work programme – proofing before publication

Automatic procedures and collection of European comments and votes

Importance to anticipate future IEC work items for harmonized standards

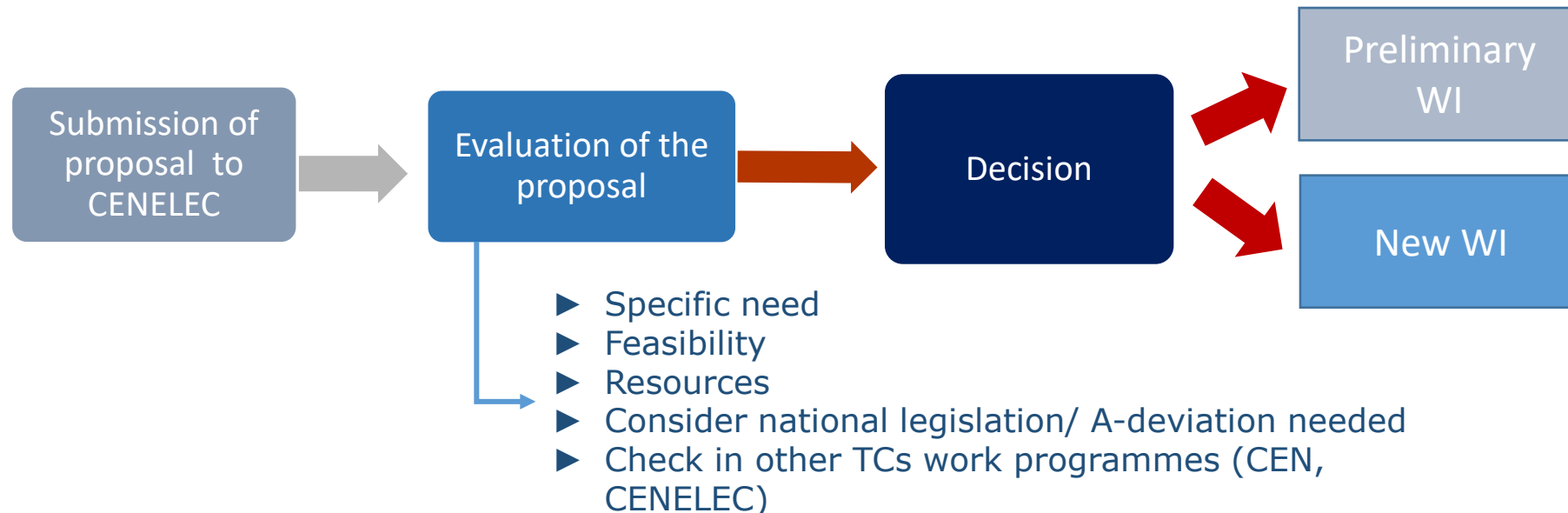
Standards development



Proposal – Evaluation and decision

Proposals may originate from:

- Existing Technical Committees
- European Commission or Agency
- National Committees (NCs)
- CENELEC Partner Organizations



New project

Template **mandatory** with a **justification** for not offering it to IEC!

- ▶ Precise information needed (e.g. superseding EN(s), link with IEC, possible a-deviation(s), link with EU regulation, ...)
- ▶ TC decision: 5 members committed to actively participate
- ▶ Target dates are very important
- ▶ Filled in template to be sent to dataservice@cencenelec.eu
- ▶ BT decision (by correspondence)
- ▶ If approved → standstill
- ▶ WI in TC work programme → **timeframe to be respected!** → alerts sent by CCMC to TCs

Creation of New Work Item

- ▶ New Work Item' form: **mandatory**
- ▶ Precise information needed (e.g. superseding EN(s), possible a-deviation(s), link with EU regulation, ...) including the lead
- ▶ NWI form to be sent to dataservice@cencenelec.eu
- ▶ Registration of the WI – **BT decision** and then dataservice activates the NWI
- ▶ If WI is accepted, standstill applies

TC Document reference

CENELEC **New Work Item Proposal**

TC Name:	TC_NAME	
TC Title:	TC_TITLE	
Secretariat:	NC	Date of proposal: (YYYY-MM-DD)

Information on the Work Item

Title:	
English	<u>Title_en</u>
French (optional)	<u>Title_fr</u>
German (optional)	<u>Title_de</u>
Scope:	
Scope	

Creation of New Work Item

As of February 2024, the approval of NWIs will be delegated to Technical Committees (following BT decision D172/C118 – September 2022)

- via IT tool
- weighted vote will apply for the approval of NWIs intended to become EN, TS and HD, while TRs will be approved via simple majority (in line with Clause 6 of IR2)
- dedicated webinar for to Technical Committees to be held in January 2024 (provisional date: 18 January 2024)

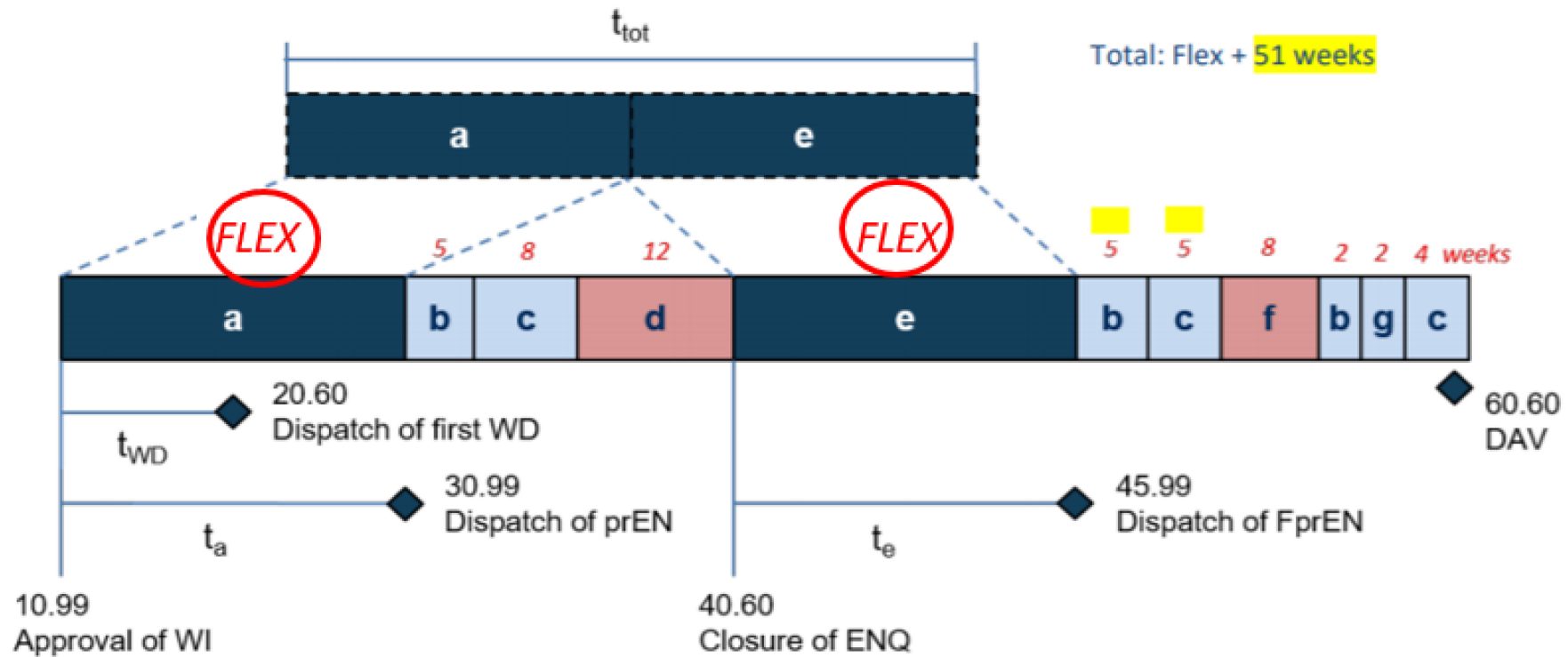
Flexible standards development process

- ▶ TCs have maximum 68 weeks to draft standards
- ▶ TC to define the target dates when adopting NWIs:
 - ▶ Target date for dispatch ENQ draft to CCMC (min 1 week)
 - ▶ Target date for dispatch FV draft to CCMC (min 6 weeks)

Note: the Target date for dispatch 1st WD is automatically set to the half of the time that is planned for ENQ

Flexible standards development process

Fig. 1



- a Drafting of prEN
- b Editing
- c Translation and preparation of national publication
- d Enquiry
- e Comments handling / preparation of FprEN
- f Formal Vote
- g TC proofing

- Internal process
- Technical work
- Voting

BT

- ▶ Flexible standards development process implemented in April 2020
- ▶ Applicable to CENELEC 'homegrown' ENs (not applicable to parallel EN IEC)
- ▶ Some further information:
 - Introduction - https://youtu.be/JB_nX6g6C04
 - Module 1: Planning - <https://youtu.be/WGChUW2Tv74>
 - Module 2: Implementing the planning - <https://youtu.be/Gi0ZnuGJ1Bw>
 - Module 3: Monitoring - <https://youtu.be/UJmrbHDNNN4>
 - Module 4: Review of the planning - <https://youtu.be/xZWNE-tQTIs>



WHAT:

Allocation of time (duration), work item per work item, by indicating the following 3 target dates, in CENELEC NWI form:

- Target date for dispatch of first Working Draft
- Target date for dispatch of ENQ draft
- Target date for dispatch of FV draft

Timeframe - planning

Project management

Proposed target dates and corresponding duration in weeks:			
This section applies only to WIs for homegrown CLC standards (including homegrown amendments to IEC standards) and homegrown standards developed by a CEN-CLC/JTC with CLC lead.			
<u>Project start date (10.99)</u> <u>yyyy/mm/dd</u>	1 st WD (20.60) Date will be added by CCMC. It is half the number of weeks planned for ENQ (30.99)	ENQ (30.99) <u>yyyy/mm/dd</u> 10.99 + <u>X</u> weeks	FV (45.99) <u>yyyy/mm/dd</u> 40.60 + <u>X</u> weeks

To indicate the timeframe in # weeks



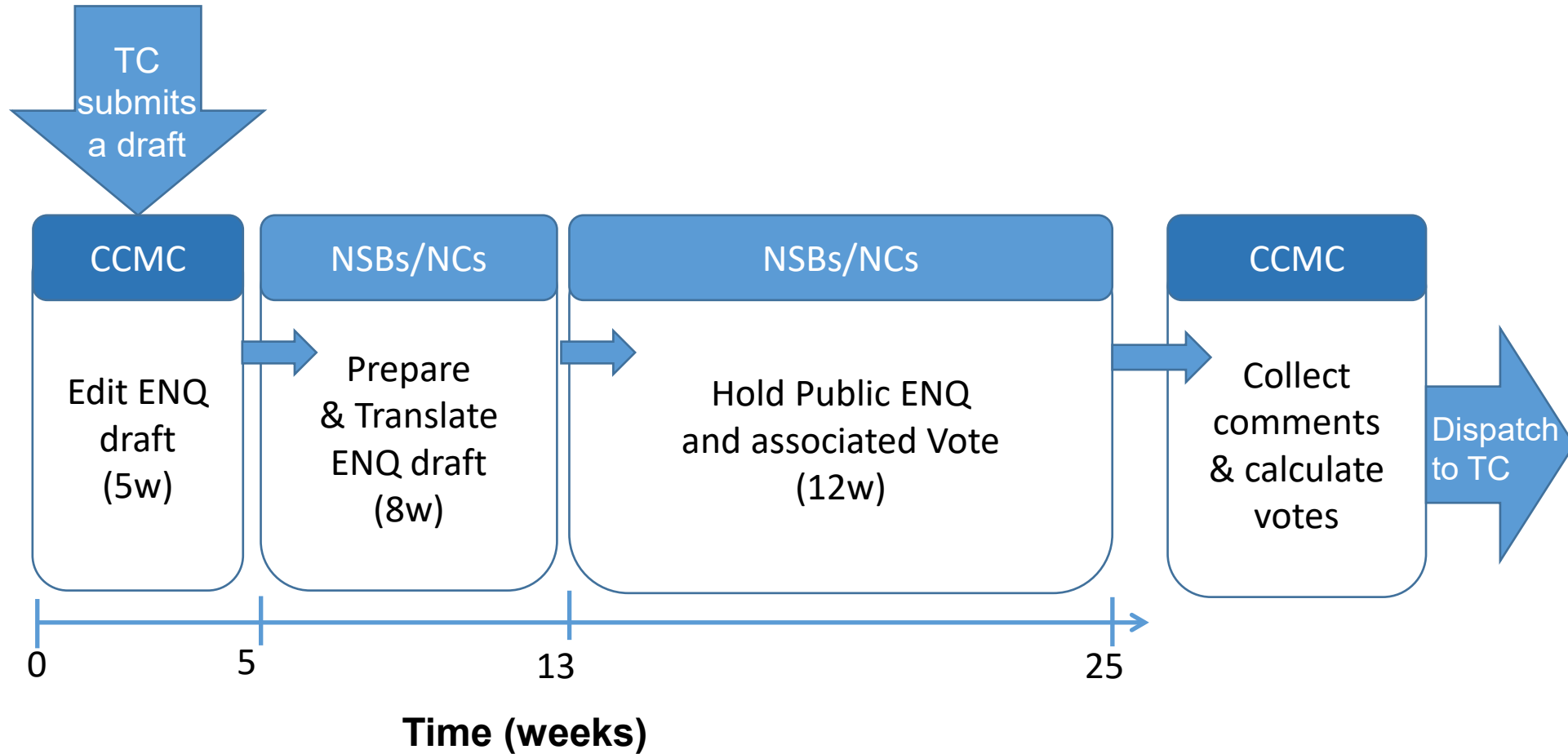
At any time before the dispatch for Enquiry (i.e. 30.99), the TC leadership in cooperation with the relevant WG convenor have at disposal the following options for changing the planning:



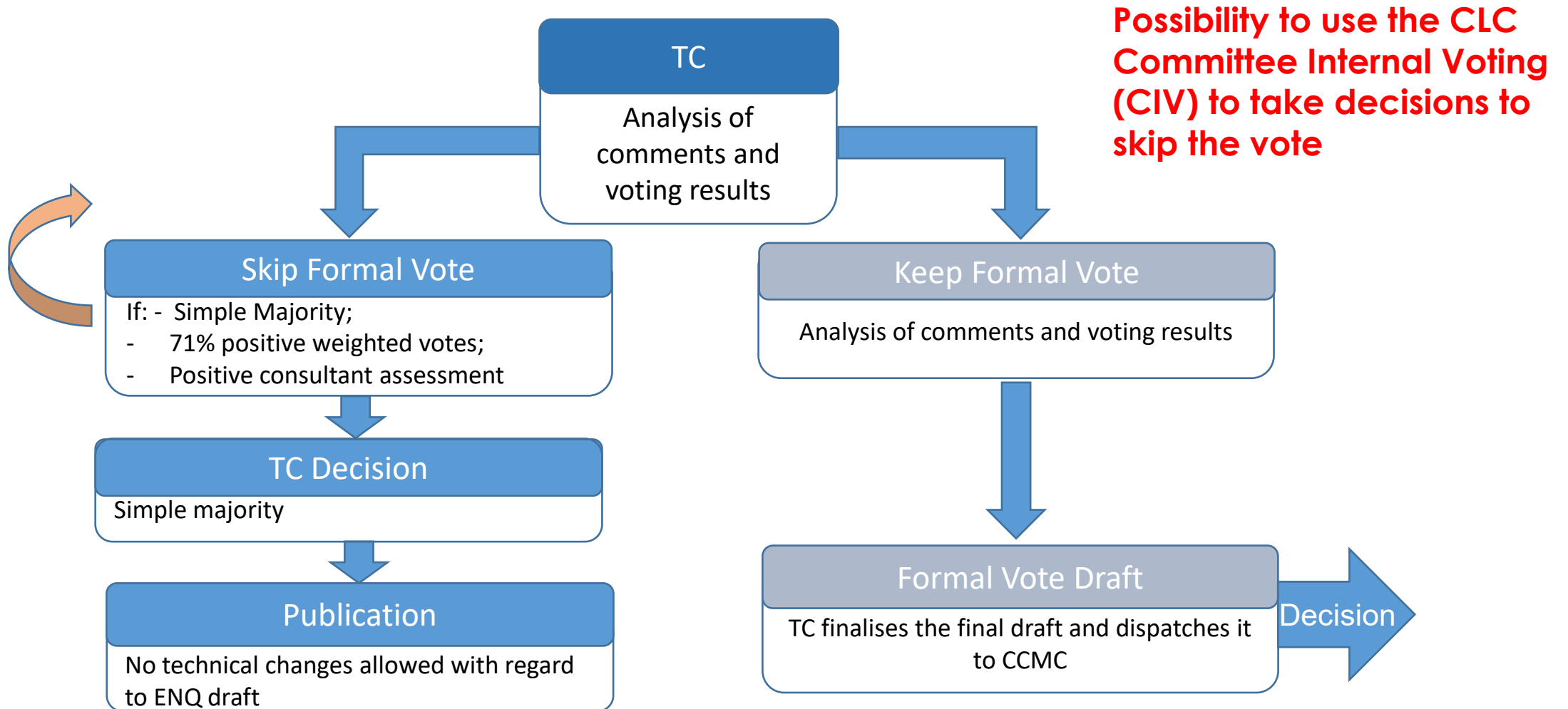
- a) To change the planning by using **the 'one change' option**. It requires a TC decision.
- b) To ask for **a tolerance of 9 months**. It requires a TC secretary request. A second tolerance may be exceptionally granted with a TC decision, approved by CLC/BT

It is recommended to use the 'one change' option first, and then in case of needs the toler

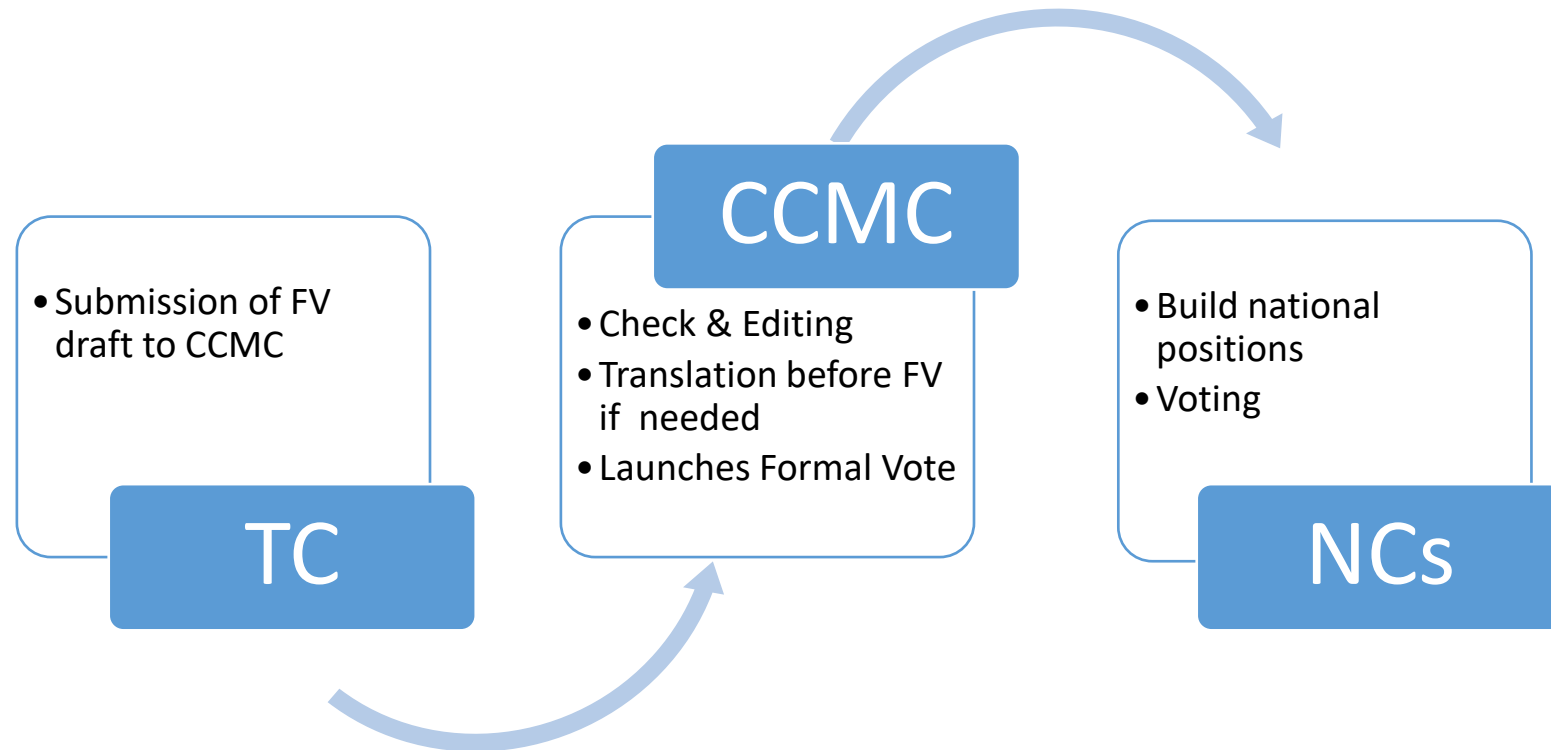
Public Enquiry



Consideration of comments



Approval



71% positive votes (weighted) → approved European Standard

Approval

Member country	Weighting	Member country	Weighting
France	29	Switzerland	10
Germany	29	Serbia	7
Italy	29	Croatia	7
United Kingdom	29	Denmark	7
Turkey	29	Finland	7
Poland	27	Ireland	7
Spain	27	Lithuania	7
Romania	14	Norway	7
Netherlands	13	Slovakia	7
Belgium	12	Cyprus	4
Czech Republic	12	Estonia	4
Greece	12	Latvia	4
Hungary	12	Luxembourg	4
Portugal	12	Slovenia	4
Austria	10	FYROM	4
Bulgaria	10	Iceland	3
Sweden	10	Malta	3
		TOTAL	412

Vote simulation tool available on CENELEC website: [here](#)

CCMC finalizes and publishes the EN + provides EN to National Committees for national publication

- ▶ Members publish ENs as national standards (+ may translate into national language)
- ▶ Withdraw conflicting standard(s)

Handling comments at FV - Decision D163/029

- ▶ Only **obvious editorial errors** and errors introduced by CCMC

'Obvious editorial error' is an editorial error that is recognized as such immediately and without any doubt, both by the CCMC editor and the TC Secretary'

▶ **TC proofing**

- ▶ 2 weeks → 3 weeks exceptional upon TC request
- ▶ No reply → CCMC proceed to finalization

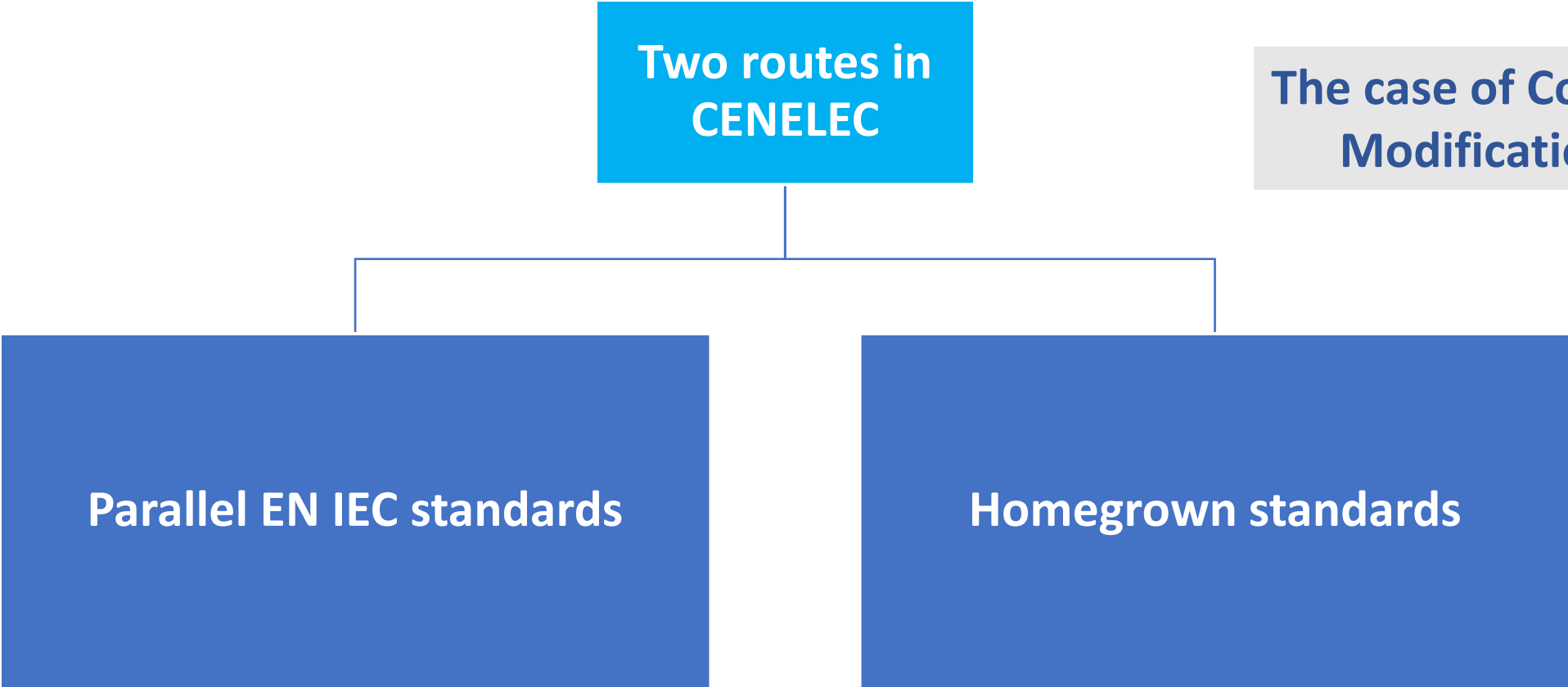
Amendments = modification/addition to or deletion of specific parts of the text → Only the amended text will be voted upon

▶ If amended → NWI request needed → Track: Enquiry (+ vote)

Corrigendum = Corrects mistakes that lead to incorrect/unsafe use of EN (→ TC rationale needed)

Maintenance → Process initiated by CCMC (alerts sent) → TC to ensure that EN content is still valid 5 years after publication

Standards development



The case of Common Modifications!

▶ CEN-CENELEC Internal Regulations Part 2

2.14

common modification

alteration of, addition to or deletion from the content of a reference document, approved by CEN/CENELEC and thus forming part of the EN (and HD for CENELEC)

▶ CENELEC BOSS:

<https://boss.cenelec.eu/fadel/commonmods/Pages/default.aspx>

▶ Matrix of responsibilities:

https://boss.cenelec.eu/media/BOSS%20CENELEC/ref/matrix_commonmods_annex_z_clc.pdf → [webinar](#) held in July 2023

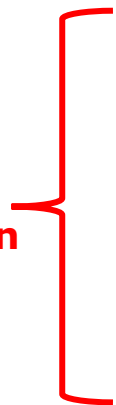
▶ [ISO-IEC Guide 21-1](#) 'Regional or national adoption of International Standards and other International Deliverables — Part 1: Adoption of International Standards'

Common Modifications

In phase

Common Modifications through European amendment (A11)

2 Work Items in the work programme



Parallel CDV/ENQ

Parallel FDIS/FV

Publication of EN IEC

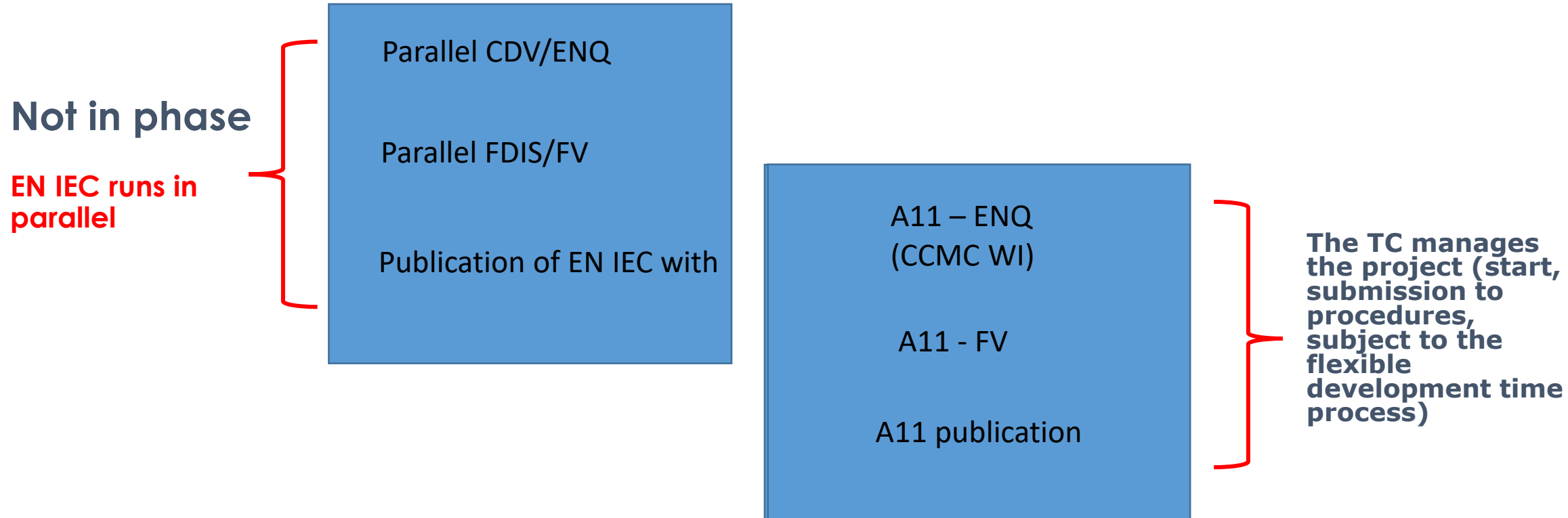
A11 – ENQ (CCMC WI)

A11 - FV

A11 publication

- ▶ **TC decision (informs CCMC) - no New Work Item request to BT – secretary to notify CCMC asap (at the latest 2 weeks before the CDV)!**
- ▶ **The two work items will progress in parallel (EN IEC and EN IEC A11)**
- ▶ **European elements → always in the A11 (common mods and European Annexes)**

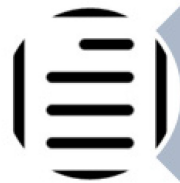
Common Modifications



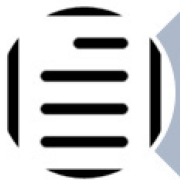
- ▶ NWI request to CLC/BT
- ▶ The publication of the EN IEC can be put on hold (but not preferred), pending the finalization of the A11

Other deliverables

Adapting to market needs



Technical Specification (TS)

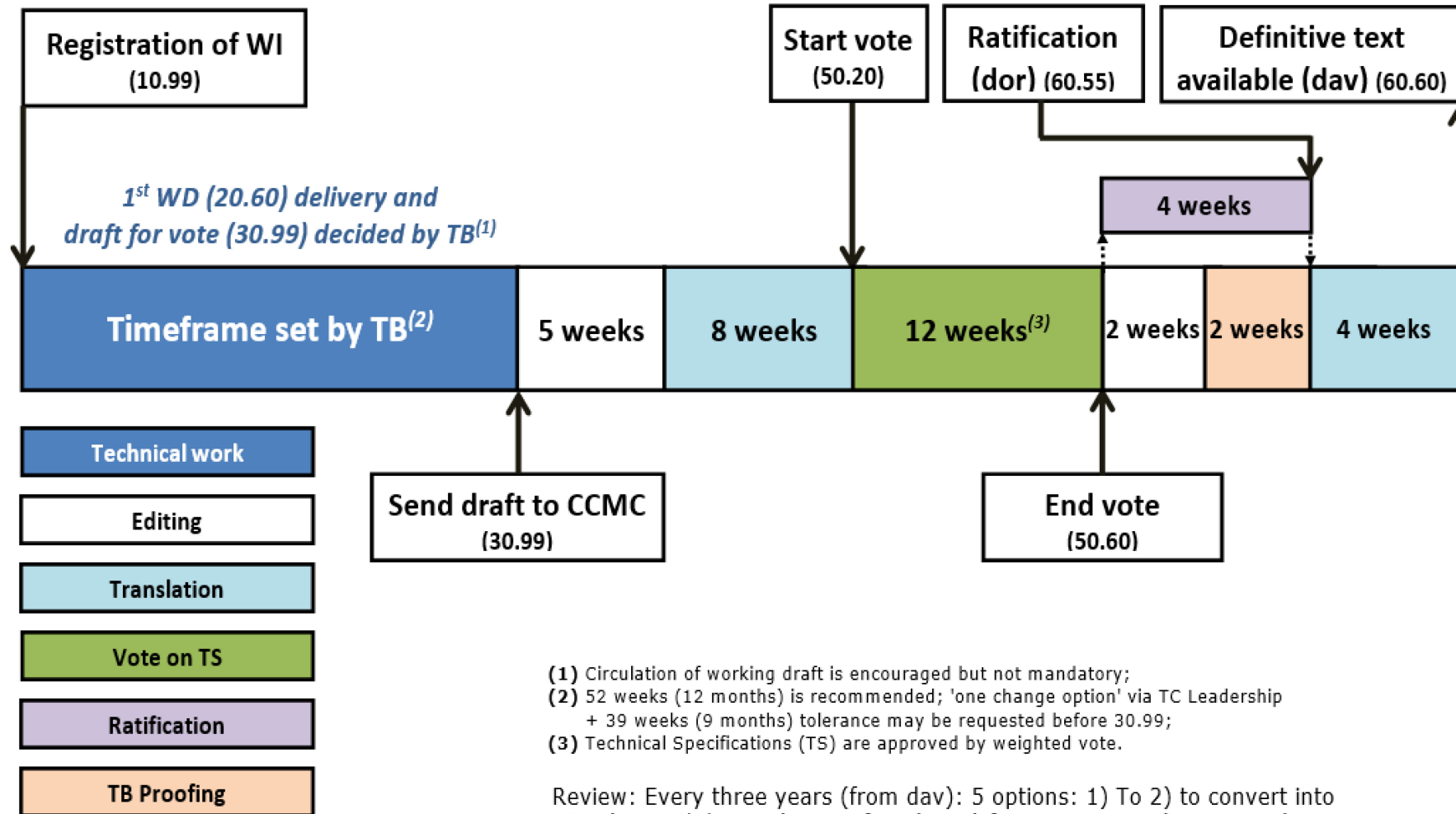


Technical Report (TR)



CEN Workshop Agreement (CWA)

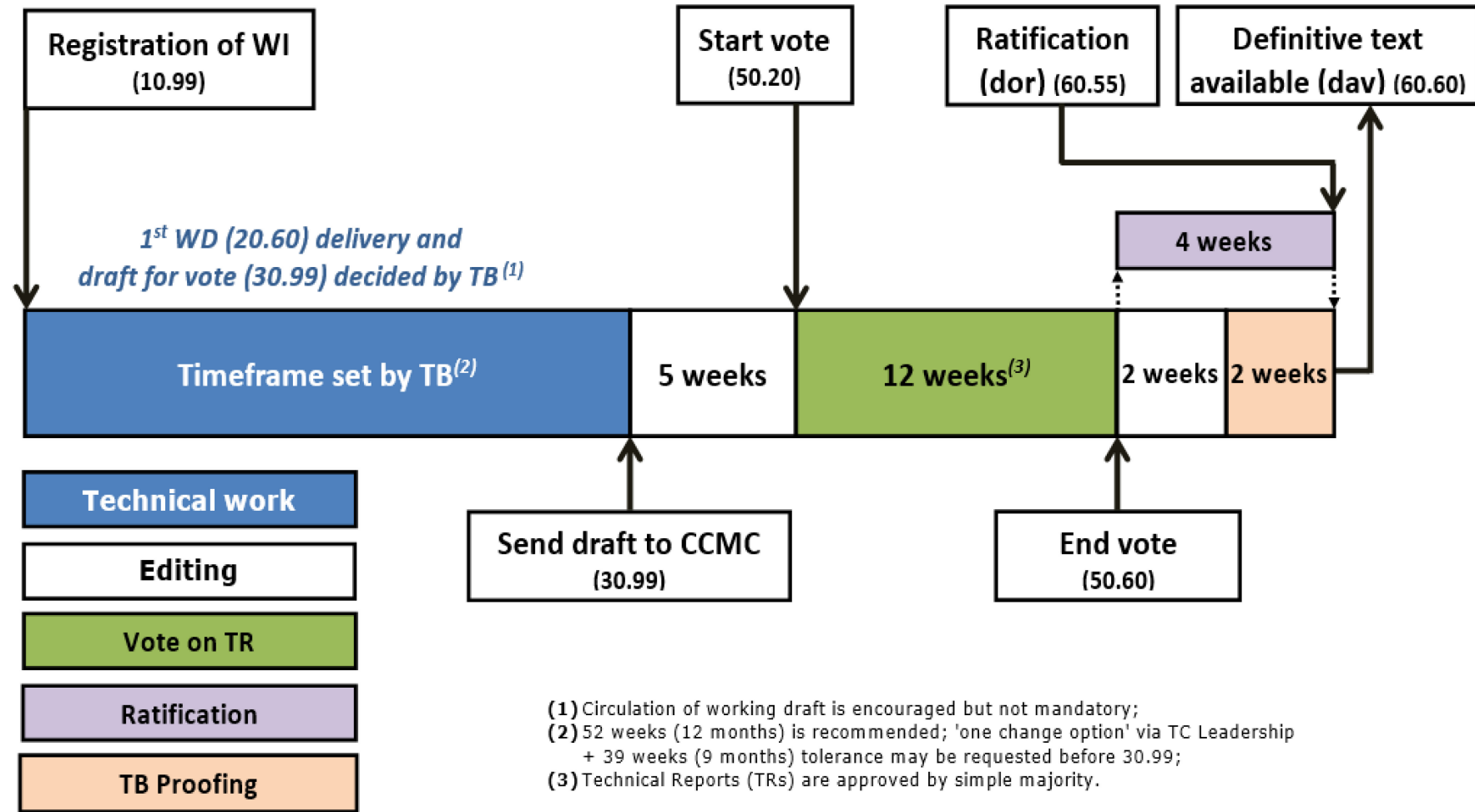
Technical Specification (TS)



- (1) Circulation of working draft is encouraged but not mandatory;
- (2) 52 weeks (12 months) is recommended; 'one change option' via TC Leadership + 39 weeks (9 months) tolerance may be requested before 30.99;
- (3) Technical Specifications (TS) are approved by weighted vote.

Review: Every three years (from dav): 5 options: 1) To 2) to convert into EN, 3) to withdraw, 4) to confirm (once) for 3 years; or 5) to revise (new edition of TS)

Technical Report (TR)



(1) Circulation of working draft is encouraged but not mandatory;
 (2) 52 weeks (12 months) is recommended; 'one change option' via TC Leadership + 39 weeks (9 months) tolerance may be requested before 30.99;
 (3) Technical Reports (TRs) are approved by simple majority.

Review: No limited lifetime.

Workshop Agreement


Developed in 'Workshops' (WS):

- Flexible (possibility to join in up until the very end)
- Direct participation
- Open to non-European

Represent the agreement of the WS participants

Used for:

- Emerging or rapidly-changing technologies
- Output of Research Projects
- As try-out before the development of ENs

A large blue triangle pointing upwards, containing white text.

Maximum
lifetime:
6 years !

Reminder - drafting, editing and publishing

Getting started

CEN/TC XXX
Date: 20XX-XX
prEN XXXXX: XXXX
Secretariat: XXX

Introductory element — Main element — Complementary element
Einführendes Element — Haupt-Element — Ergänzendes Element
Élément introductif — Élément central — Élément complémentaire

ICS:

CCMC will prepare and attach the official title page.

Useful tools to get you started

- ▶ [Internal Regulations Part 3](#)
- ▶ [STD.dot template](#)

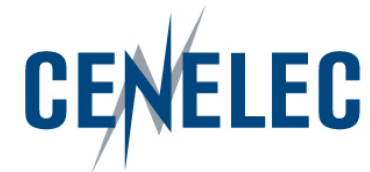
Simple template

- ▲ Find on [CENELEC BOSS](#)

Ready-styled

Contains all elements

- ▲ Styles
- ▲ Headings
- ▲ Content layout



INFORMATION FOR TECHNICAL BODY OFFICERS



Lunch and networking

12:30 – 13:30



INFORMATION FOR TECHNICAL BODY OFFICERS

Welcome back!

Understanding the CENELEC standardization process



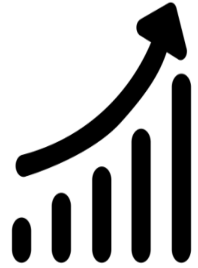
Ingrid Soetaert & Catherine Vigneron

CCMC Standards Development



3. Frankfurt Agreement & Day-to-day management

International dimension



1 region = one standard instead of 34

→ Status of EN

→ Standstill

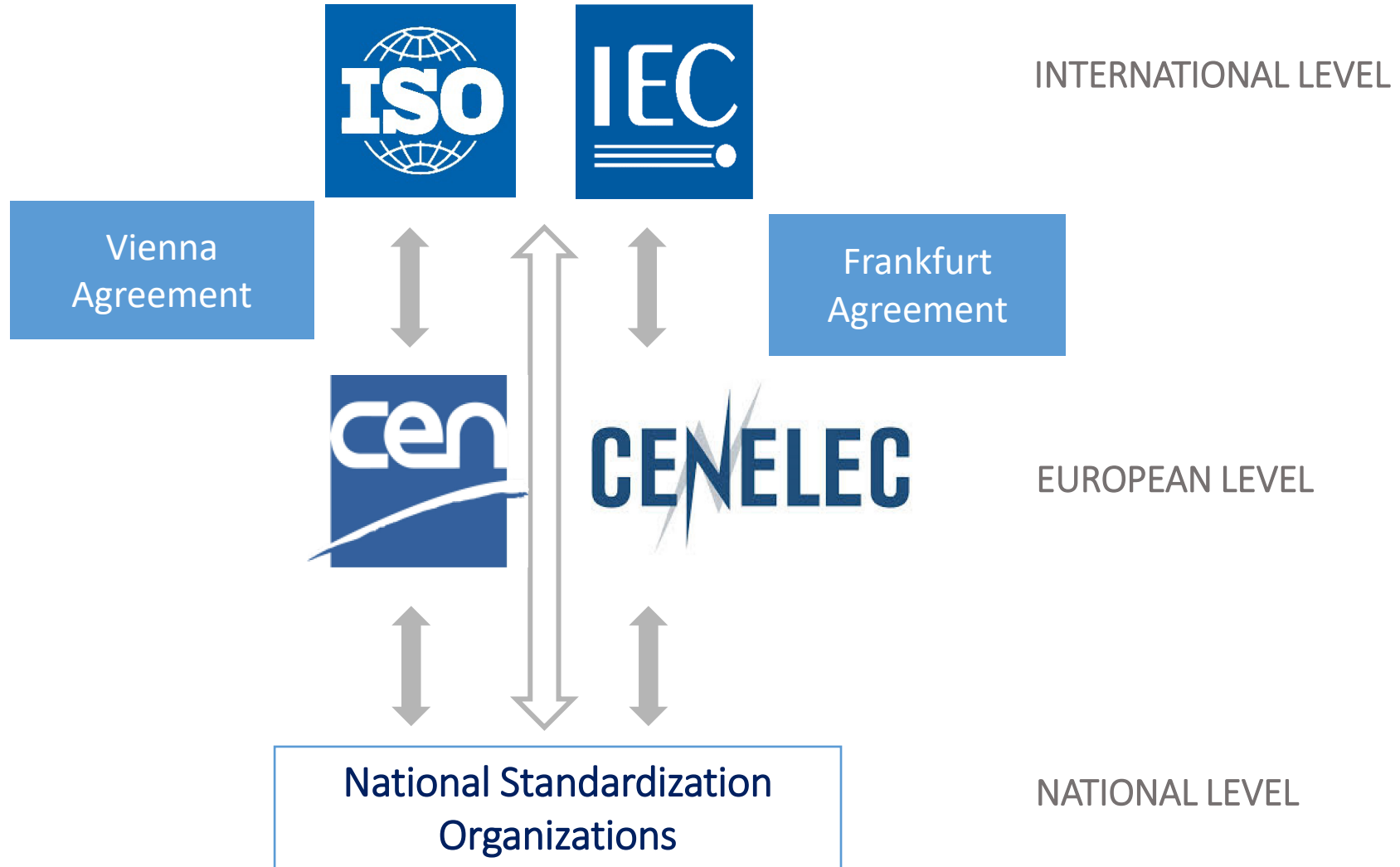
→ Obligation to implement

30% CENELEC portfolio = harmonized standards

CE Presumption of conformity

**Access to European Market of 700 Million consumers
using global standards**

International dimension



Primacy of International standards

- ▶ Commitment to primarily undertake the work at IEC level
- ▶ Expedite publication and common adoption of International Standards
- ▶ Rational use of available resources/avoid duplication
- ▶ Accelerate standards preparation process in response to market demands
- ▶ Include mechanisms to cater for particular needs that may arise from European stakeholders

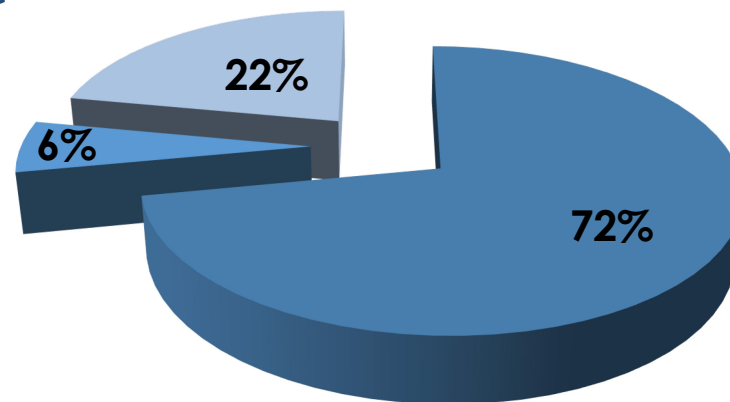
Supporting the European Market, using global standards

Facts and figures

What?	When?	Why?
Agreement on common planning of new work and parallel voting between IEC and CENELEC	1996 – Signature Dresden Agreement 2016 – Signature Frankfurt Agreement	Underline commitment of IEC & CLC to undertake work at Intl. level Promote global economy Ensure rational use of back office resources

CENELEC – Portfolio – relation to IEC

Only European Standards (no TS, no TR, no Guides) are covered by the Frankfurt Agreement



- Identical to IEC publications
- Based on IEC publications
- No relation to IEC publications

4 pillars



Common planning of New Work Items

Work initiated in IEC

When not 'exempted'

- ▶ Assigned to mirroring CLC Technical Committee (CLC/TC) or Reporting Secretariat (CLC/SR)
- ▶ Registered in CLC database with timescales
- ▶ Information e.g. on legislative aspects → CLC/TC responsibility and feedback to IEC
- ▶ Parallel adoption process starts in CENELEC

When 'exempted'

- ▶ No 'European adoption' but national adoption possible
- ▶ Standstill may apply → to be **used 'as such'** in Europe, no competing standards

Common planning of New Work Items

Work initiated in CENELEC (NWI)

Before initiating:

- ▶ Assess situation at IEC - possibility the IEC TC timely initiates the work

On approval of a New Work Item for a European standard at CENELEC

- ▶ Default* -- the New Work Item is offered to IEC
- ▶ The CLC/TC starts the work – IEC starts a NWIP on the WI
- ▶ If IEC NWIP accepted → CLC hands over work

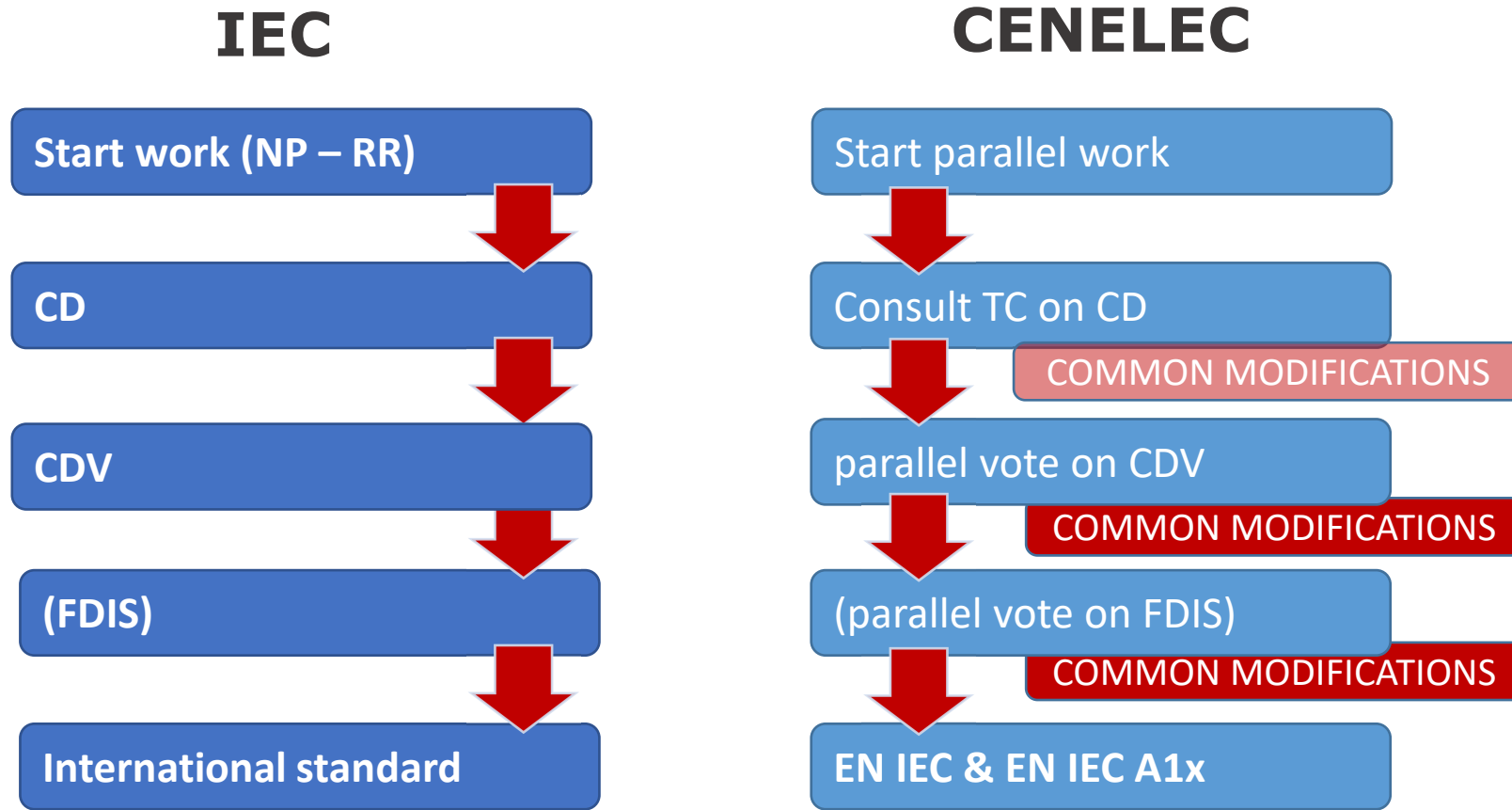
* For specific reasons, the CLC Technical Board (BT) can decide not to offer

Max 24 weeks

Parallel voting

It is important to start parallel work from the earliest stages!!

From CDV on systematic parallel voting procedure in CENELEC



Conversion of EN into IEC standards

▶ What?

- Published CENELEC deliverables (“homegrown standards”) offered to IEC
- European Common Modifications to IEC based standards

▶ If IEC TC takes them on board

- IEC text identical to CENELEC text → ‘*Boomerang case*’
 - No parallel voting
 - Just a correction of the numbering by corrigendum to reflect IEC number
- IEC text different from CENELEC text → Parallel vote

Examples



IEC 63202-1

Edition 1.0 2019-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Photovoltaic cells –
Part 1: Measurement of light-induced degradation of crystalline silicon
photovoltaic cells**

**Cellules photovoltaïques –
Partie 1: Mesure de la dégradation induite par la lumière des cellules
photovoltaïques au silicium cristallin**

EUROPEAN STANDARD

EN IEC 63202-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2019

ICS 27.160

English Version

Photovoltaic cells - Part 1: Measurement of light-induced degradation of crystalline silicon photovoltaic cells (IEC 63202-1:2019)

Cellules photovoltaïques - Partie 1: Mesure de la
dégradation induite par la lumière des cellules
photovoltaïques au silicium cristallin
(IEC 63202-1:2019)

Photovoltaik-Zellen - Teil 1: Messung der lichtinduzierten
Degradation von kristallinen Silizium-Photovoltaikzellen
(IEC 63202-1:2019)

This European Standard was approved by CENELEC on 2019-07-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Examples (Common Modifications)



1. Modification to the title

In the title modify the upper voltage limit from "30 kV ($U_m = 36$ kV)" to "36 kV ($U_m = 42$ kV)".

2. Modification to the Introduction

In the introduction, modify:

"This part 1-3 of IEC 61238 deals with type tests for compression and mechanical connectors for use on copper or aluminium conductors of power cables for rated voltages above 1 kV ($U_m = 1,2$ kV) up to 30 kV ($U_m = 36$ kV)."

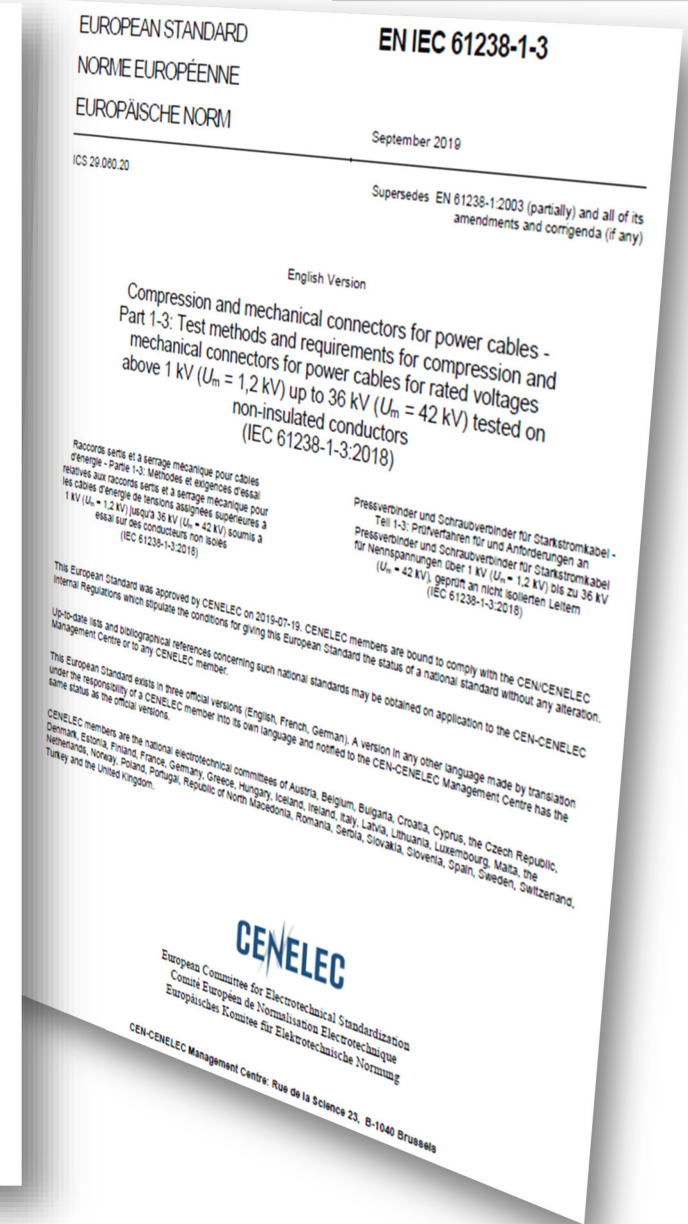
to read:

"EN IEC 61238-1-3:2019 and its A11:2019 (adopting and modifying IEC 61238-1-3:2018-05), deals with type tests for compression and mechanical connectors for use on copper or aluminium conductors of power cables for rated voltages above 1 kV ($U_m = 1,2$ kV) up to 36 kV ($U_m = 42$ kV)."

3. Modification to the scope

In the scope modify the upper voltage limit from "30 kV ($U_m = 36$ kV)" to "36 kV ($U_m = 42$ kV)".

EN IEC 61238-1-3:2019/A11:2019



4. Developing ENs intended to be cited in OJEU

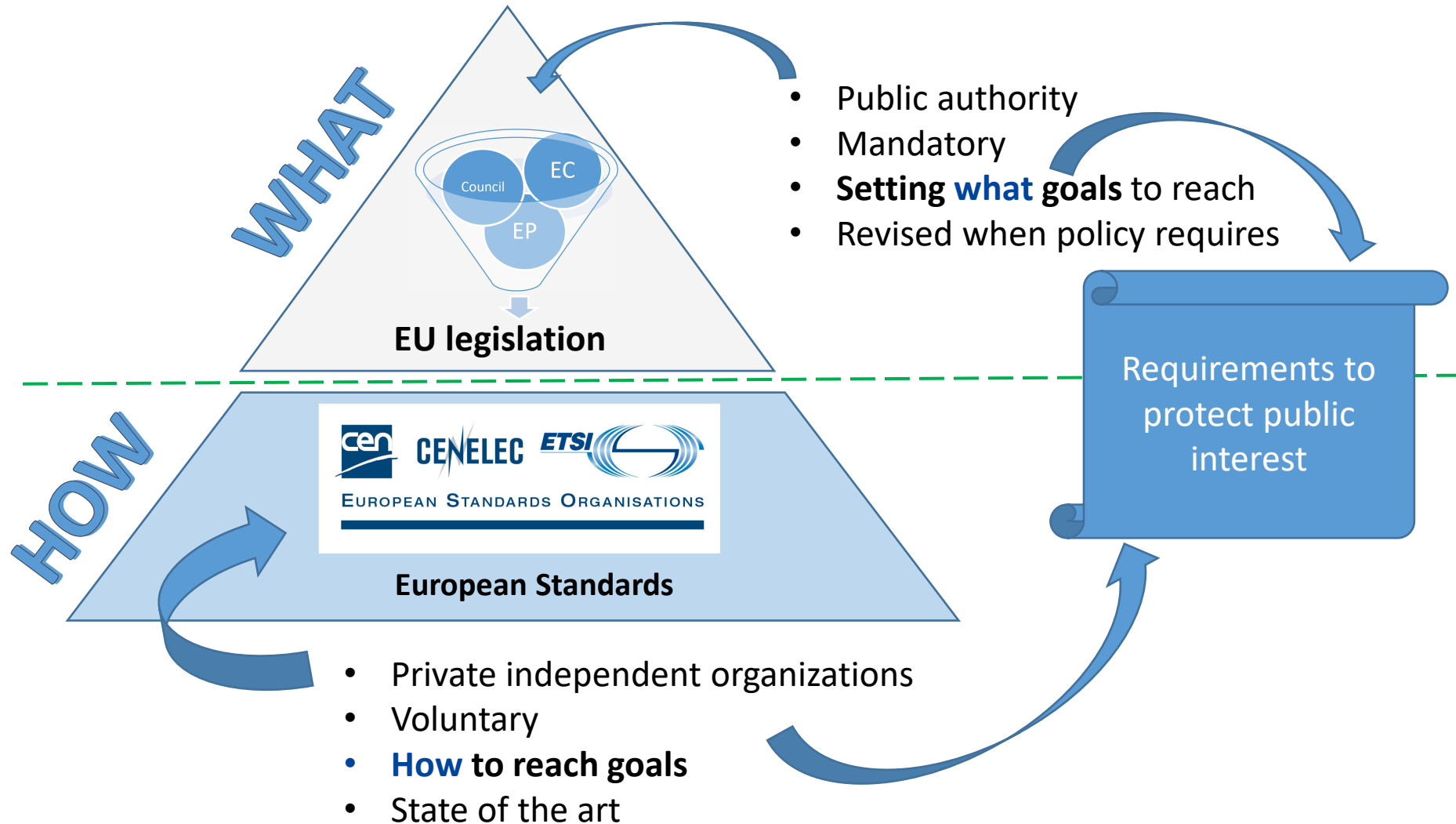
- **New Approach Directives**

- Define essential requirements (e.g. health and safety)
- Indicate WHAT shall be achieved without specifying HOW
- Transposed in Member States

- **Reference to standards**

- At EC's request, CEN and CENELEC develop Harmonized Standards (hENs)
- ENs set out technical specifications to meet Directives' requirements

How Standardization supports legislation



New Legislative Framework

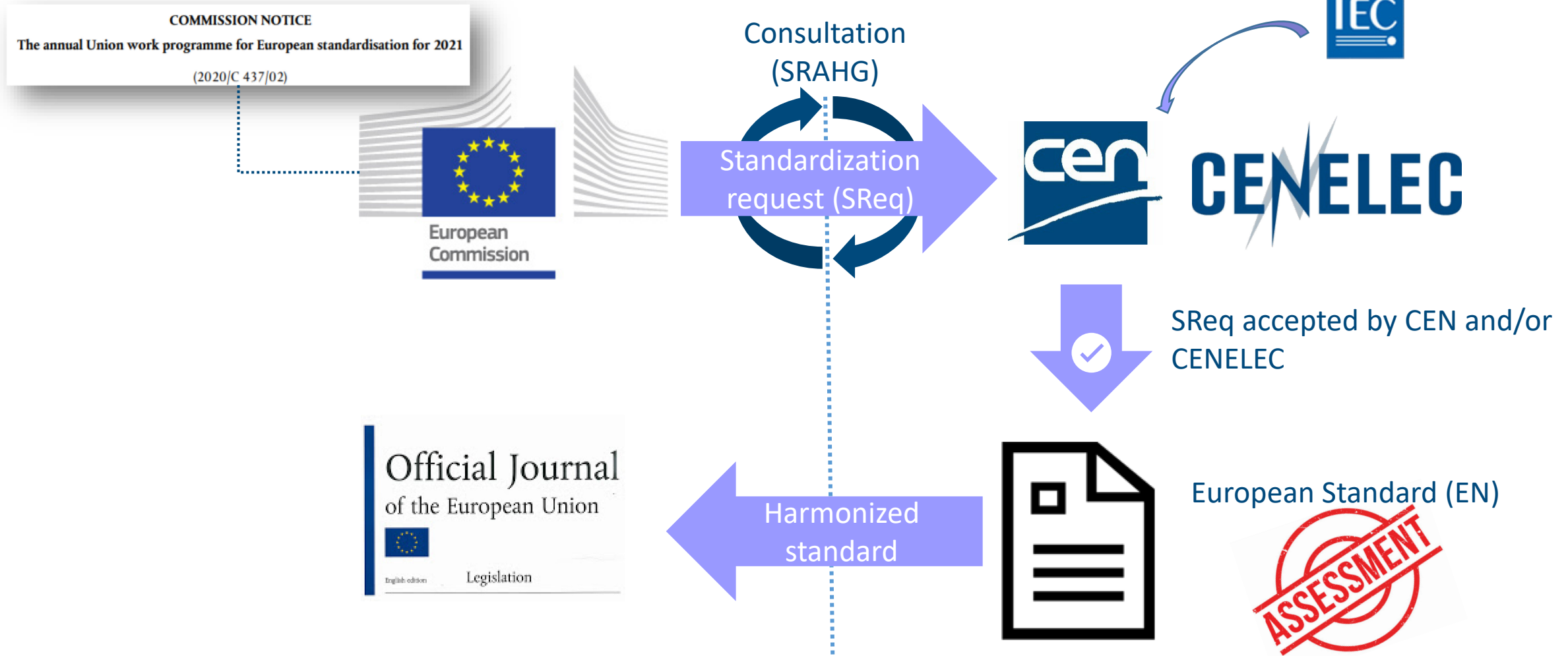
European law (Directives / Regulations) regulates important industrial sectors:

- ▲ PPE
- ▲ Medical devices
- ▲ Low voltage equipment
- ▲ Machinery
- ▲ EMC
- ▲ Radio Equipment

[Link to EC page on Harmonised standards](#)

- ✓ Standards are a tool to support EU policy and legislation according to the principles of the New Legislative Framework (previously known as New Approach)

Standardization Request



> 3000 harmonized standards listed in the OJEU

Link with EU legislation

Standardization Request is a precondition for citation of harmonized standards in Official Journal of the European Union (OJEU)

Harmonized must be assessed and have the following 'European elements'

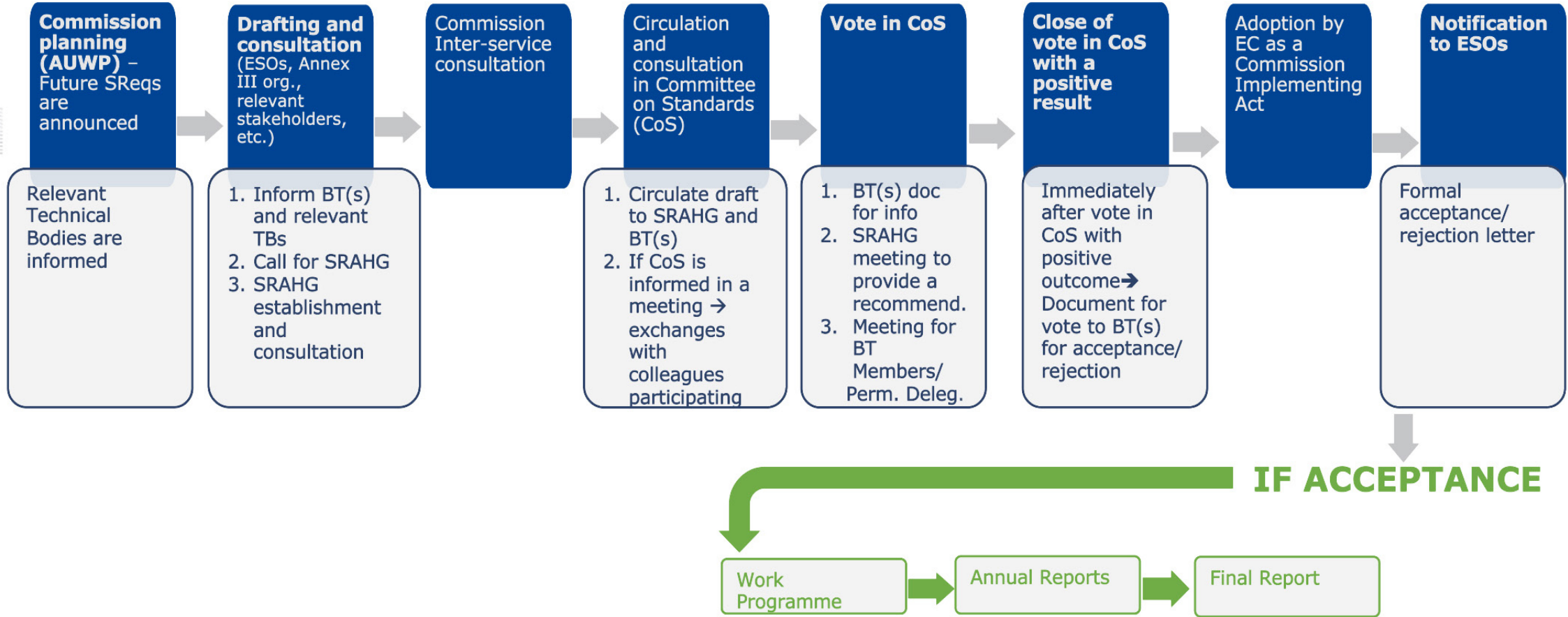
- ▶ **Annex ZZ** (i.e table establishing the relationship between the clauses of the standard and the regulatory requirements)
- ▶ **For IEC driven standards → Annex ZA** (i.e table establishing the relationship between)

Link with EU legislation

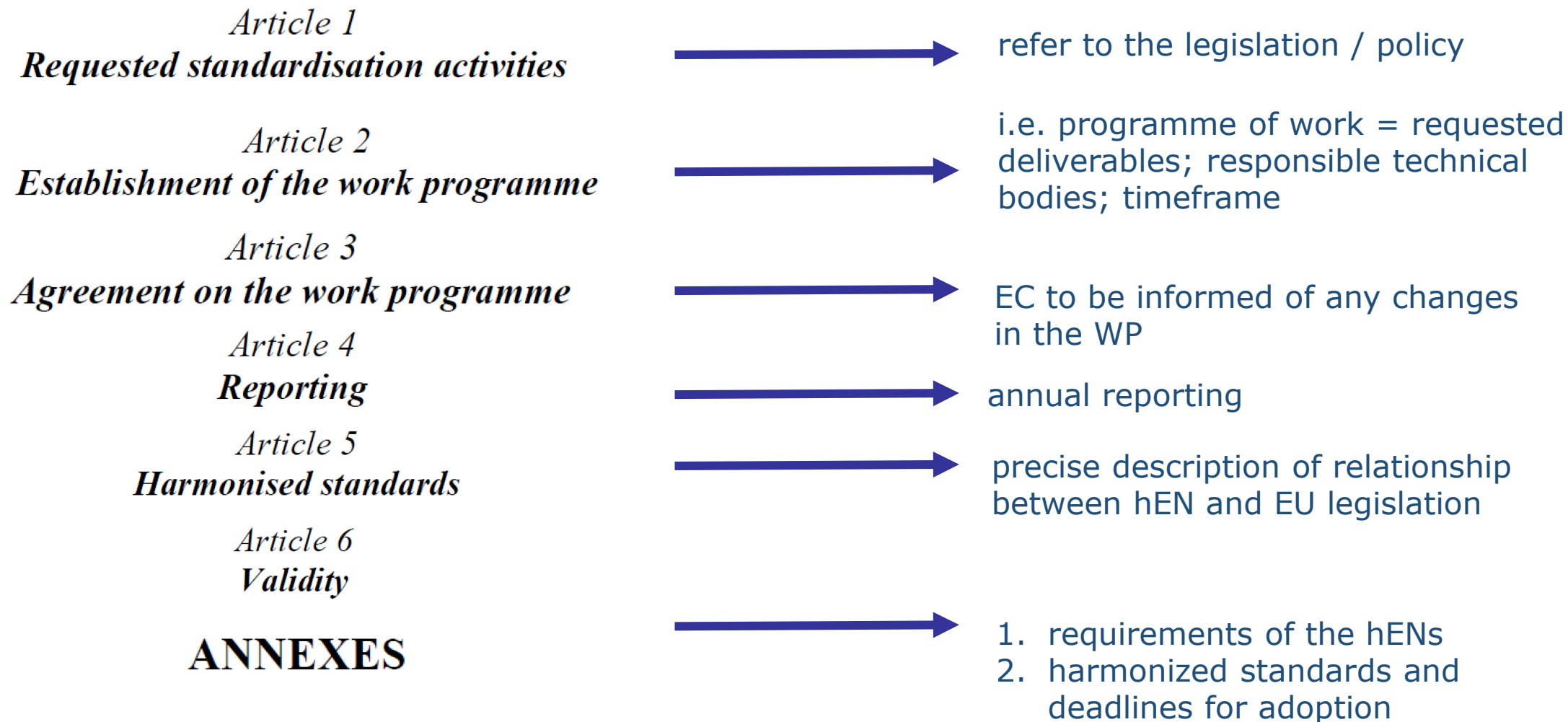
Citation of standards in the Official Journal of the European Union (OJEU)

- ▶ Citation in the OJEU always **EC responsibility** – CEN and CENELEC offer candidate hENs to EC for citation every 2 months (more frequent offerings foreseen as of 2024)
- ▶ **Only when listed in the OJEU → presumption of conformity** for Essential Requirements covered by the hEN
- ▶ The lists of hENs are **published in the OJEU** and continuously updated: http://ec.europa.eu/growth/index_en.htm

Standardization Request process



Standardization request structure



Annex ZZ

All harmonised standards must include an **Annex ZZ**, demonstrating the relationship between the clauses of the standard and the regulatory requirements

Annex ZZ templates

Annex ZZA (informative)

Relationship between this European Standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

Replace Annex ZZA in Part 1 by the following:

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Compliance with this Part 2 when used together with the Part 1 provides one means of conformity with the safety objectives.

Table ZZA.1 – Correspondence between this European Standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks/ Notes
1 a)	Clauses 4, 7	None
1 b)	Clauses 4, 7	None
1 c)	Clauses 4, 7	None
2 a)	Clauses 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31	None
2 b)	Clauses 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31	None
2 c)	Clauses 6, 7, 11, 15, 17, 19, 20, 21, 22, 24, 25, 30, 32	None
2 d)	Clauses 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31	None
3 a)	Clauses 6, 7, 11, 17, 19, 20, 21, 22	None
3 b)	Clauses 7, 11, 15, 19, 22, 25, 32	None
3 c)	Clauses 6, 7, 10, 11, 14, 17, 19, 21, 22	None

Annex ZA (for IEC driven standards)

All harmonised standards must include an **Annex ZA** which links normative references to international publications to their corresponding European publications.

Most often, the normative references are not dated in the IEC standard, therefore **they must be dated through the Annex ZA**

Guidance on normative references in harmonized standards

Annex ZC (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

The Annex ZC of Part 1 is applicable, except as follows:

Publication	Year	Title	EN/HD	Year
<i>Addition:</i>				
IEC 60584-1	-	Thermocouples - Part 1: EMF specifications and tolerances	EN 60584-1	2013
IEC 60068-2-6	-	Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60079-15	2010	Explosive atmospheres – Part 15: Equipment protection by type of protection "n"	EN IEC 60079-15	2019
IEC 60335-2-34 +A1 +A2	2012 2015 2016	Household and similar electrical appliances – Safety – Part 2–34: Particular requirements for motor-compressors	EN 60335-2-34	2013
ISO/IEC 80079-20-1	-	Explosive atmospheres – Part 20–1: Material characteristics for gas and vapour classification – Test methods and data	EN ISO/IEC 80079-20-1	2019
ISO 817 +A1 +A2	2014 2017 2021	Refrigerants – Designation and safety classification	-	-
ISO 5149-1 +A1 +A2	2014 2015 2021	Refrigerating systems and heat pumps – Safety and environmental requirements – Part 1: Definitions, classification and selection criteria	-	-
ISO 7010	2011	Graphical symbols – Safety colours and safety signs – Registered safety signs	EN ISO 7010 +A1 +A2 +A3	2020 2020 2022 2022

European elements and checklist

- ▶ Technical Committees are invited to provide to CCMC all elements that could **help the Consultants when assessing the draft**: e.g. risk assessment (as relevant) and the Technical Body responses (“observations from the secretariat”) to the previous assessment (i.e. on the FWD)
- ▶ Use of [‘common checklist’](#) mandatory
- ▶ Sectorial checklists:

5 TEMPLATES

- › Annexes ZZ
- › European Commission’s compliance checklist for LVD
- › European Commission’s compliance checklist for EMC
- › European Commission’s compliance checklist for RED

Citation in the Official Journal of the EU (OJEU)

2.4.2020 EN Official Journal of the European Union L 102/9

ANNEX I

Annex I to Implementing Decision (EU) 2019/436 is amended as follows:

(1) row 35 is replaced by the following:

'35.	EN 62841-2-1:2018 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-1: Particular requirements for hand-held drills and impact drills (IEC 62841-2-1:2017, Modified) EN 62841-2-1:2018/A11:2019	C
------	--	---

(2) the following rows are added:

'43.	EN ISO 18497:2018 Agricultural machinery and tractors – Safety of highly automated agricultural machines – Principles for design (ISO 18497:2018)	B
44.	EN ISO 19353:2019 Safety of machinery – Fire prevention and fire protection (ISO 19353:2019)	B

https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards_en

Summary list of titles and references of harmonised standards

The summary below consolidates the references of harmonised standards published by the Commission in the Official Journal of the European Union (OJ). It reproduces information already published in the L or C series of the OJ. It contains all references which, when the summary was generated, still provided a presumption of conformity together with references already withdrawn from the OJ.

The Commission services provide this summary for information purposes only. Although they take every possible precaution to ensure that the summary is updated regularly and is correct, errors may occur and the summary may not be complete at a certain point in time. The summary does not as such generate legal effects.

- [Summary list as pdf document](#)
- [Summary list as xls file](#)

Assessment

- ▶ 2021-12-27: EC launched call for tender 'Technical Assistance to the Commission for the Assessment of Harmonised Standards'
- ▶ Duration of contract: 2 + 2 years (signed in August 2022)
- ▶ **HAS contractor = Ernst & Young (EY)**
- ▶ **EY hired a pool of consultants to assess the drafts**
 - ▶ Assessment duration: **5 weeks after notification to EY**

Sectors covered

DG GROW

Unit H.2 Machinery & Equipment

- Equipment for potentially Explosive Atmospheres (ATEX)
- Machinery (MD)
- Measuring Instruments (MID&NAWI)
- Gas Appliances (GAR)
- Recreational Craft (RCD)
- Electro-magnetic Compatibility (EMC)
- Radio Equipment (RED)
- Lifts (LD)
- Protective Equipment (PPE)
- Cableway installations (CWR)
- Low Voltage Equipment (LVD)
- Pressure equipment and Simple Pressure Vessels (PED&SPVD)

Unit F.2 Bioeconomy, Chemicals & Cosmetics

- Explosives for Civil Use (Expl)
- Pyrotechnic Articles (Pyro)
- Toys
- Fertilisers (Fert.)

Unit H.1 Construction

- Construction Products (CPR)

Unit I.3 Green and Circular Economy

- Eco Design (ED)

NEW UNDER THIS CONTRACT

DG SANTE

Unit B.6 -Medical devices, Health Technology Assessment

- Medical Devices (HE)

DG DEFIS

Unit A.1- Defence Industry and Market Policy

- Unmanned Aircraft Systems (UAS)

DG JUST

Unit E.4- Product safety and Rapid Alert System

- General Product Safety (GPSD)

DG MOVE

Unit C.4- Rail Safety and Interoperability

- Interoperability of Rail Systems (IRS)

Consultants can:

- ▶ Perform assessment tasks (75% of their time)
- ▶ Participate in meetings to offer clarification on their assessments (max. 25% of time spent on meetings)
- ▶ Convey EC positions to Technical Bodies

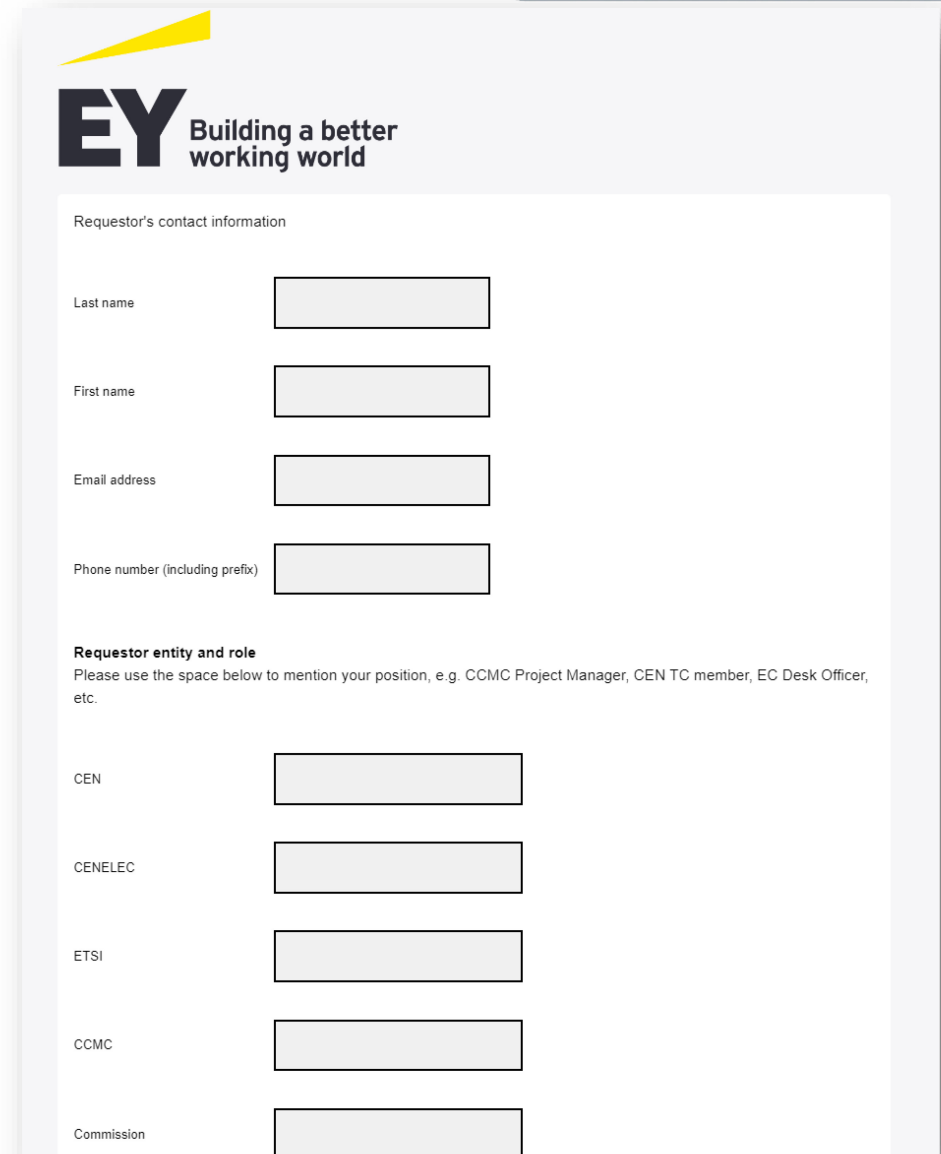
Consultants cannot:

- ▶ Contribute to standards development process
- ▶ Offer guidance to TCs on how their standards can become compliant
- ▶ Perform Assessments on documents received directly from ESOs/TCs
- ▶ Modify completed Assessment Reports
- ▶ Participate in meetings without EY approval

Assessment – exchange with Consultant

HAS meeting request tool:

- ▶ https://globaleysurvey.ey.com/jfe/form/S_V_b71bSqkXAtAqqTs
- ▶ Technical Body secretary to make request, at least 5 weeks before the meeting



EY Building a better working world

Requestor's contact information

Last name

First name

Email address

Phone number (including prefix)

Requestor entity and role
Please use the space below to mention your position, e.g. CCMC Project Manager, CEN TC member, EC Desk Officer, etc.

CEN

CENELEC

ETSI

CCMC

Commission

Assessment - outcome

'Compliant'	If the same conclusion is done reached by EC, the publication of the reference in the OJ is normally possible without any specific notice
'Conditional compliance'	To be used only in case of problems related to the dates of normative references to other inter-linked standards and meaning that, if the identified issue(s) is positively addressed by the ESO after the assessment, and if the same conclusion is reached done by EC the publication of the reference in the OJ is normally possible without any specific notice
'Lack of compliance'	If the same conclusion is reached done by the Commission, the publication of the reference in the OJ is likely not possible without adaption of the document

Assessment - outcome

- ▶ HAS Platform tool → **Consultant Assessment interface**
 - ▶ CCMC requests draft hENs for assessment
 - ▶ assessment reports uploaded
- ▶ Technical Body secretary will get a notification (via email) when HAS assessment report is available

Assessment report for EN 50310:2016/FprA1:2019 - 90/385/EEC - FV has been received (Test environment)

NoReply <noreply@notif.cenelec.eu>
To

This sender noreply@notif.cenelec.eu is from outside your organization.


CENTC49_00049042_ENQ_MBCCEN896_20221010.zip
359 KB

Reply Reply All Forward ...
Thu 2022-11-24 16:21

CAUTION: This email originates from outside of CEN-CENELEC. Do not open attachments or follow links unless you are sure this email comes from a known sender and you know the content is safe.

Assessment report received

Please find enclosed the report for the assessment **EN 50310:2016/FprA1:2019 - 90/385/EEC - FV**



HAS Backend API v1.0.43+Branch.master.Sha.52827dfdb144a9edf34028943706802da3ee3c6f-BuildId.3615-CommitDateUtc.2022-11-17

Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses

Responsible: CLC/TC 23E **Drafting:** CLC/TC 23E/WG 01 **Project Leader:** Mrs H Menou
WI/Standard status: Active/Published **Track:** EN/ENQ+FV
Category: Amendment **Parallel:** No **Contact point:** Ms M. De Coninck ✉ (mdeconinck@cencenelec.eu)

- WI Plan (Milestones)
- WI Plan (All)
- Title/Scope
- Legislation**
- WI relations
- Standstill & Deviation
- Decisions
- Classifications
- Remarks
- Released Documents
- Implementations
- Technical Body
- Timeline
- TCs of interest

Standardization request (formerly mandate):

Reference	Mandate Title (Full)	Status
M/552 (EMC)	[C(2016) 7641 final] Standardisation request as regards harmonised standards in support of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility	Confirmed
M/511 (Mandate to LVD)	Mandate to CEN, CENELEC and ETSI relating to harmonised standards in the field of the Low Voltage Directive	Confirmed

Legislation:

Reference	Legislation Title	Official Journal Ref. (Date)
2014/35/EU (LVD_2014)	Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits	L 79 (2023-03-17)

Referencing Method: OJEU **Citation status:** Candidate for citation
Assessment Method: HAS assessment **Related SReq/Mandate:** M/511 (Mandate to LVD)
Draft content: Annex Z required

Assessments

Phase	Requested on	Completed on	Assessment result	Consultant

Citation monitoring:

Date	Event	Comment
2023-03-17	Standard cited/referenced	
2022-10-24	Standard offered to EC	

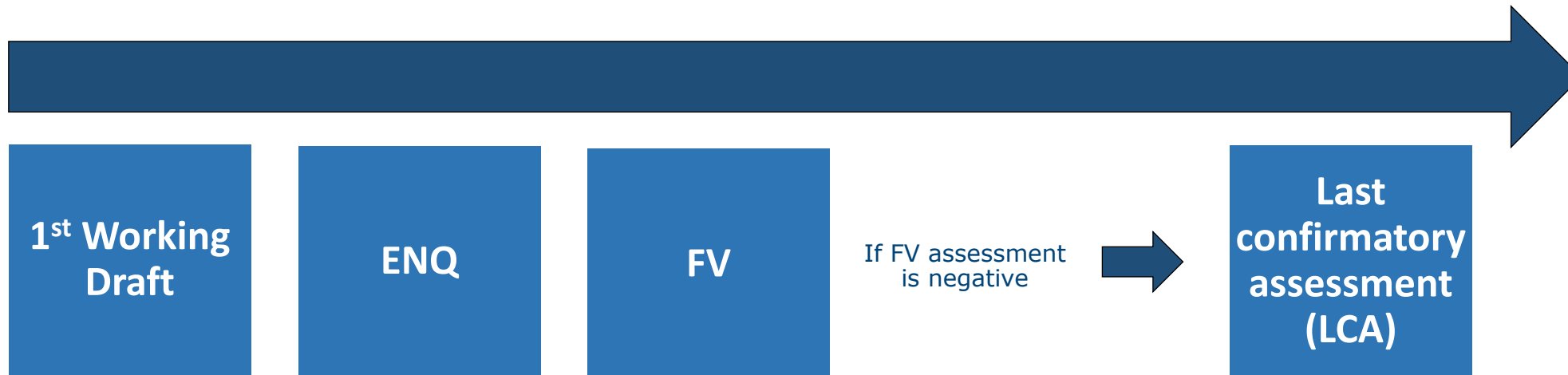
- ▶ Projex-online include HAS assessment and legislation information:
 - ▶ Fields related to legislation (e.g. referencing method, assessment method)
 - ▶ Citation monitoring information
 - ▶ **HAS assessment reports** will be available in Projex-online for download

2 different processes coexisting

- New projects for Homegrown standards → 'Innovative process'
- Projects under development and EN-IEC standards → 'Existing process'
 - *Common Modifications are considered as homegrown standards
 - *Discussion ongoing with IEC/CO to apply the innovative process to EN-IEC standards
- ▶ **TBs are invited** to request a CCMC quality check on ENQ and FV drafts before the projects are submitted to Enquiry and FV
 - *The request, together with the filled-in 'Common Checklist' and all supporting documents, are to be sent only by email to hsc@cencenelec.eu
 - *CCMC will perform Quality Checks (QC) within 15 working days (3 weeks)

Existing process

When can assessments be requested?



- ▶ CEN and CENELEC can request maximum 4 assessments per WI
- ▶ 1 assessment per stage + LCA
- ▶ Last Confirmatory Assessment
- ▶ Not possible to request assessments of published standards

Assessment

Existing process

Contractor

Consultant(s)

Consultant(s)

Consultant(s)



EC Desk officer



flex

flex

60.60
DAV

◆ First WD

◆ 30.99
Dispatch of prEN

◆ 45.99
Dispatch of FprEN

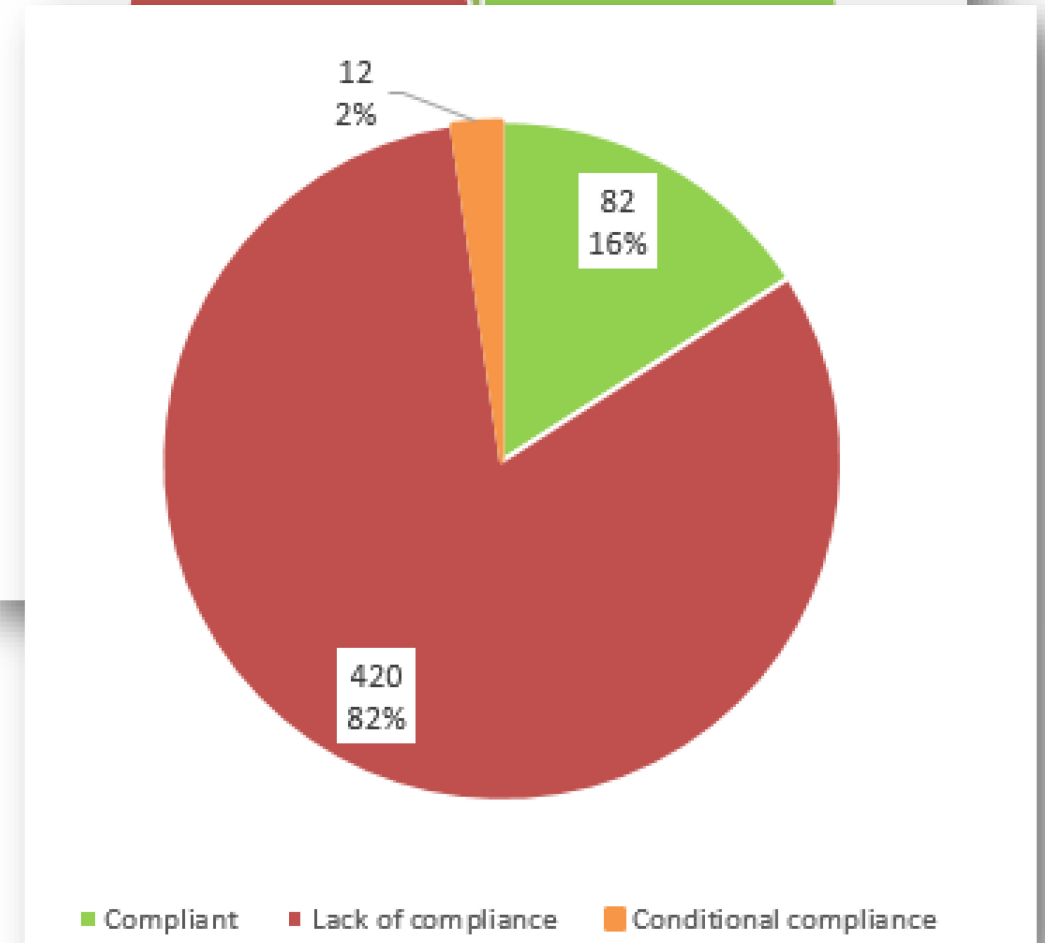
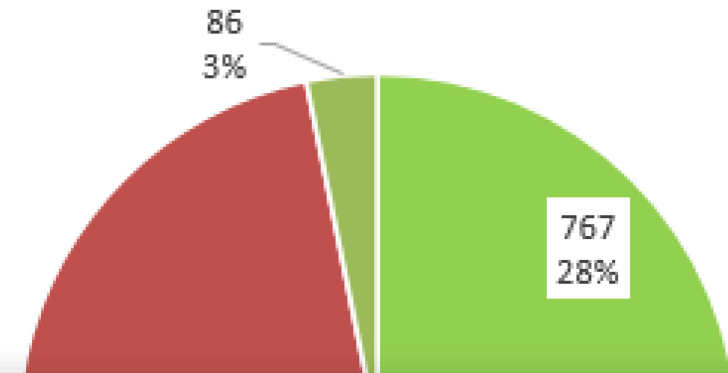
10.99
Approval of WI

40.60
Closure of ENQ

- a Drafting of prEN
- b Editing
- c Translation and preparation of national publication
- d Enquiry
- e Comments handling / preparation of FprEN
- f Formal Vote
- g TC proofing

Why the innovative process

- ▶ Challenging to get a compliant assessment
- ▶ During previous HAS contract: average around 30% 'compliant outcome' for all stages
- ▶ Since January 2023 under the new HAS contract: average of 16% 'compliant outcome' for all stages
- ▶ Substantial change needed



Innovative process → as of October 2023 for homegrown standards
→ **2 pillars:**

▶ **Mature draft concept**

- Draft ready for ENQ
- Mature draft assessment mandatory
- Optional FWD assessment **not possible** anymore (while FWD circulation still possible)

▶ **CCMC Quality Check**

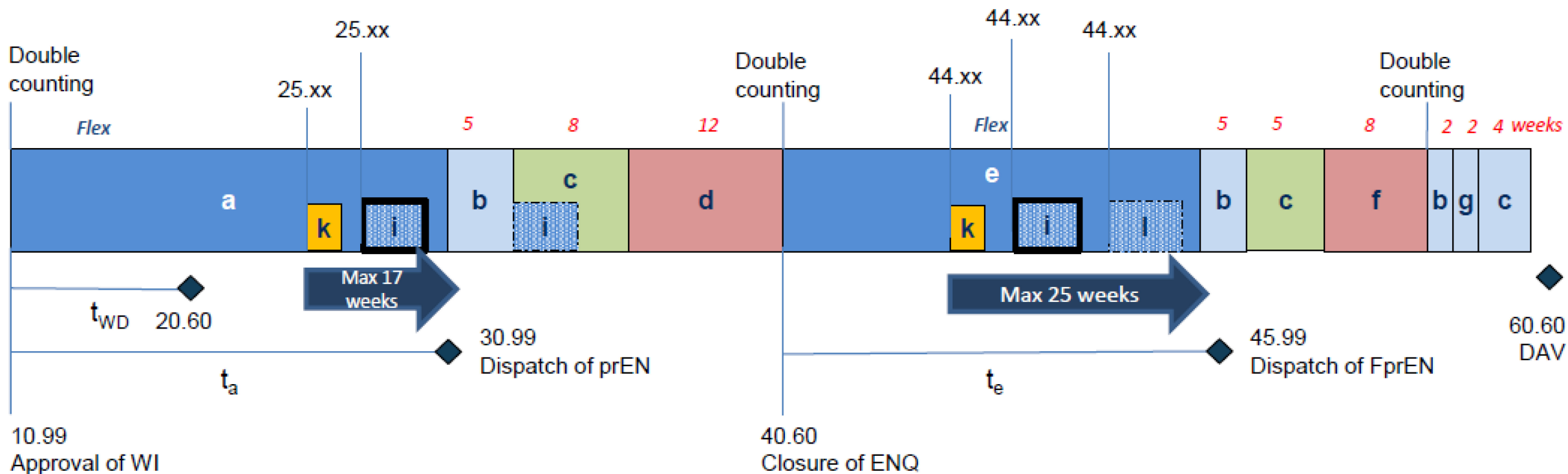
- Help Technical Bodies identify elements in the draft, or the related Annexes, that could potentially lead to a lack of compliance assessment
- Will use Common checklist as support document
 - ▶ Replaces “Harmonized Standards checklist”

4 assessments possible per work item:

1. Mature draft (mandatory)
2. Enquiry (will take place only if the first assessment is non compliant)
3. Pre Formal Vote (mandatory, if the draft does not skip FV)
4. Last Confirmatory Assessment (LCA, optional) - should become exceptional!

Interaction with standards development

Homegrown candidate hEN for citation



Preparing the New Work Item

Express the target dates through a duration in the NWIP form:

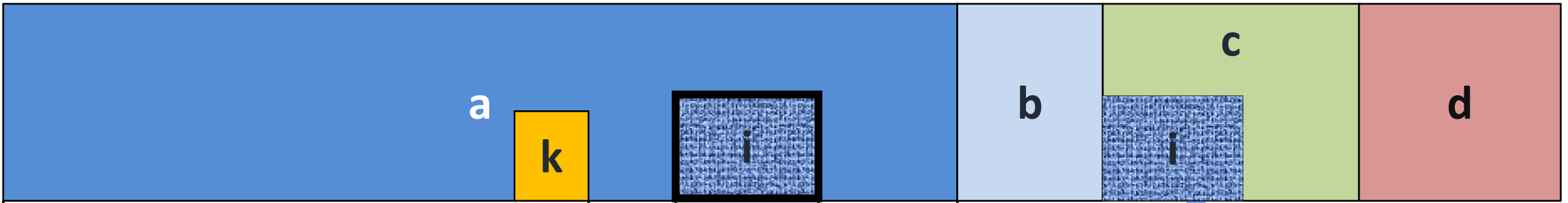
- (1 WD_TARGET: BT decision + N weeks)
- ENQ_TARGET: BT decision + N weeks
- FV_TARGET: ENQ + N weeks

Proposed target dates and corresponding duration in weeks:			
This section applies only to WIs for homegrown CLC standards (including homegrown amendments to IEC standards) and homegrown standards developed by a CEN-CLC/JTC with CLC lead.			
Project start date (10.99)	1 st WD (20.60)	ENQ (30.99)	FV (45.99)
<u>yyyy/mm/dd</u>	Date will be added by CCMC. It is half the number of weeks planned for ENQ (30.99)	yyyy/mm/dd 10.99 + 50 weeks	yyyy/mm/dd 40.60 + 18 weeks



Duration for 1WD is half of duration for 30.99. It could be indicated or will be deduced by 30.99

Innovative process impact on timeframe



Flexible process

3 weeks 4 weeks 5 weeks 5 weeks

TC to plan WG meetings to address comments.

TC to consider comments and revise.

TC to consider comments and revise.

In case of **Lack of Compliance** outcome in the Enquiry **HAS Assessment**, TC should submit the request for a **9 months tolerance**.

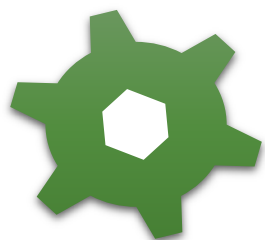
- a Drafting of prEN
 - b Editing
 - c Translation and preparation of national publication
 - d Enquiry
 - e Comments handling / preparation of FprEN
 - f Formal Vote
 - g TC proofing
 - h Indicative Assessment (optional)
 - i Assessment
 - j solving negative assessment (if necessary)
 - k CCMC Quality check
 - L Last confirmatory assessment (LCA)
- Editing
 - Technical work
 - Voting
 - Mandatory assessment
 - Confirmatory assessment Optional
 - Translation
 - CCMC Quality check

Quality check – relevant links

- ▶ Webinar drafting guidance: [CEN](#) – [CENELEC](#)
- ▶ Guidance document on normative references:
 - ▶ [CEN BOSS](#) – [CENELEC BOSS](#)
- ▶ [Webinar 'Presentation of the new EC/HAS ESOs Common checklist'](#)
- ▶ Webinar ['Innovative process for homegrown harmonised standards \(hENs\)'](#)

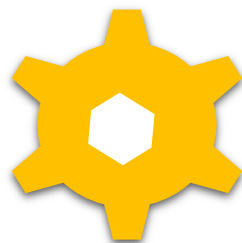
Citation of a harmonized standard in the OJEU

hEN standard developed in the support of legislation



Annexes:

TC to provide additional European elements



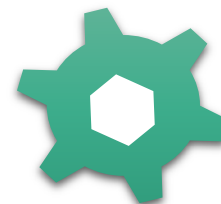
HAS Assessment:

Ensuring the standard complies to the Safety Objectives of the Directive(s)



Offering to EC:

Only if positively assessed, CCMC offers the standard to EC for citation



Final decision:

EC's decision to cite the standard in the OJEU

Standard cited in the OJEU



Principles for a successful assessment

Start the process as early as possible!

i.e. with the assessment request of the first working draft: the consultant would flag compliance issues early in the process

Systematically provide feedback!

TC shall provide feedback by responding, in writing, to the HAS consultant's comments (column: observations from the secretariat)

Communication is the key!





- ✓ Ensure communication flows between CLC/TC (interaction with the HAS consultants) and IEC/TC (writing the standard)
- ✓ Ensure communication flows with HAS Consultant: After the submission of the assessment by CCMC, TCs are encouraged to engage with HAS consultants



5. CENELEC BOSS and other useful information

Link: <https://experts.cenelec.eu/>

Your platform to:

- ▶ Applications & services
- ▶ Expert news (with 'subscribe to news' option)
- ▶ Trainings & materials
- ▶ Key initiatives
 - ▶  Digital Transformation
 - ▶  Online Collaborative Authoring
 - ▶  Standards of the Future
 - ▶  Open Source Solutions
- ▶ **CENELEC BOSS**

Business Operation Support System

- ▲ Source of stable information to CENELEC/TC secretaries, chairpersons and experts
- ▲ Quick and easy access to navigate- internet tool with public access from main CENELEC website
- ▲ CEN-CENELEC Internal Regulations are on the BOSS
 - Part 2: Common Rules for Standardization Work
 - Part 3: Rules for the structure and drafting of CEN/CENELEC Publications



The screenshot shows the homepage of the Business Operations Support System (BOSS). At the top left is the CENELEC logo. To its right is a navigation menu with links: TECHNICAL STRUCTURES, HOMEGROWN DELIVERABLES, FRANKFURT AGREEMENT DELIVERABLES, and REFERENCE MATERIAL. The main heading is "Business Operations Support System" in large, bold, black font. Below the heading is a paragraph: "The Business Operations Support System (BOSS) aims at providing practical information to those actively contributing to the development of deliverables within the CENELEC system. It clearly describes processes and gives access to instructions and guidance for their day-to-day work." At the bottom of the page is a search bar with the placeholder text "Enter key words or phrase" and a blue "SEARCH" button. The background of the page features a glowing blue brain with circuitry patterns, symbolizing technology and operations.

Business Operation Support System

Forms and templates

TECHNICAL BODY ORGANIZATION

- › Meeting agenda (NEW!)
- › Terms of Reference
- › TC Business Plan
- › TC report to BT (NEW!)
- › JTC report to BTs
- › SC report to TC
- › BTTf report to BT
- › Registration form TC meeting
- › Registration form BTTf meeting
- › Registration form (BT)WG meeting
- › Workshop - Registration Form
- › Workshop - Proposal Form
- › Workshop - Project plan
- › Application form to become member in a Joint advisory or coordination group

TECHNICAL WORK

- › Commenting template
- › Checklist – Items to be considered when drafting standards to be offered
- › IPR- Exploitation Rights License Agreement
- › IPR - Attendance list
- › IPR - Patents declaration
- › IPR - WS exploitation
- › NWI form
- › New Field of Technical Activity

ANNEX ZZ

- › Generic template (EN - FR - DE)
- › Ecodesign (EN - FR - DE)
- › EMCD (EN - FR - DE)
- › EMCD - generic text for references to EN 55011, EN55014-1, EN 55015,
- › GPSD (EN - FR and DE not available)
- › IVDR (EN - FR and DE not available)
- › LVD (EN - FR - DE)
- › Medical Devices (EN - FR and DE not available)
- › Machinery (EN - FR and DE not available)
- › RED - EMC (EN - FR (not available) - DE)
- › RED - Safety (EN - FR (not available) - DE)
- › Railway (EN - FR and DE not available) + Explanatory note

TECHNICAL BOARD

- › NC template for BT documents
- › Reply to BT consultation (NCs) - general NEW!
- › Reply to BT vote on Standardization Requests (NCs)
- › Reply to BT consultation - Partners
- › Comments on draft Standardization Requests
- › Candidature for (re)allocation of TC/SC/JTC secretariat
- › Candidature for (re)allocation of SR secretariat

TECHNICAL STRUCTURES HOME-GROWN DELIVERABLES FRANKFURT AGREEMENT DELIVERABLES REFERENCE MATERIAL

Business Operations System

The Business Operations System (BOSS) aims at supporting those actively contributing to the standardization process within the CENELEC secretariat and gives access to the day-to-day work.



BT newsletter



Sent after each BT meeting

- Report on the main outcomes of crosscutting nature discussed in the BT meetings as well as on the latest decisions of transversal nature taken by correspondence
- Sent by email to all TC Officers



More information

- ▶ Webinar: [Standardization Requests – State of Play](#)
- ▶ Webinar: [Use and justification of normative references for harmonised standards](#)
- ▶ Webinar: [Risk assessment in standards tool for harmonisation](#)
- ▶ Webinar: [Harmonized European standards: Drafting standards compliant with EU legislation](#)
- ▶ Webinar: [Webinar on EMC matters in relation to harmonized standards](#)
- ▶ Webinar: [Harmonized European standards under the Low Voltage Directive \(LVD\)](#)
- ▶ Webinar: [Matrix of responsibilities for requesting common modifications to IEC standards and the inclusion of Annex Z/\(ZA\) in IEC Standards](#)
- ▶ Webinar: [Webinar 'Implementing International Standards in Europe – The Frankfurt Agreement' \(together with IEC\)](#)

Contact points

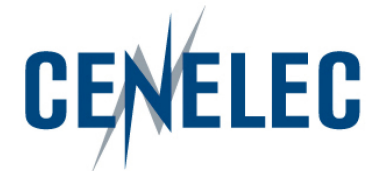
TC reports to BT, NWI requests: dataservice@cencenelec.eu

Texts for procedures: production@cencenelec.eu

Liaisons with European federations: partners@cencenelec.eu

Support on research projects: research@cencenelec.eu

For anything else, contact your Project Manager! 😊



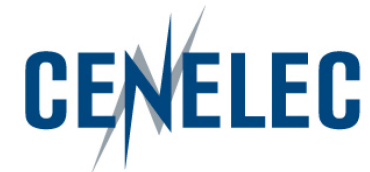
INFORMATION FOR TECHNICAL BODY OFFICERS

Thank you!

Questions?

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Ingrid Soetaert isoetaert@cencenelec.eu



INFORMATION FOR TECHNICAL BODY OFFICERS



Coffee break and networking

15:20 - 15:40