



Normalización
Española

How to plan and elaborate a CWA

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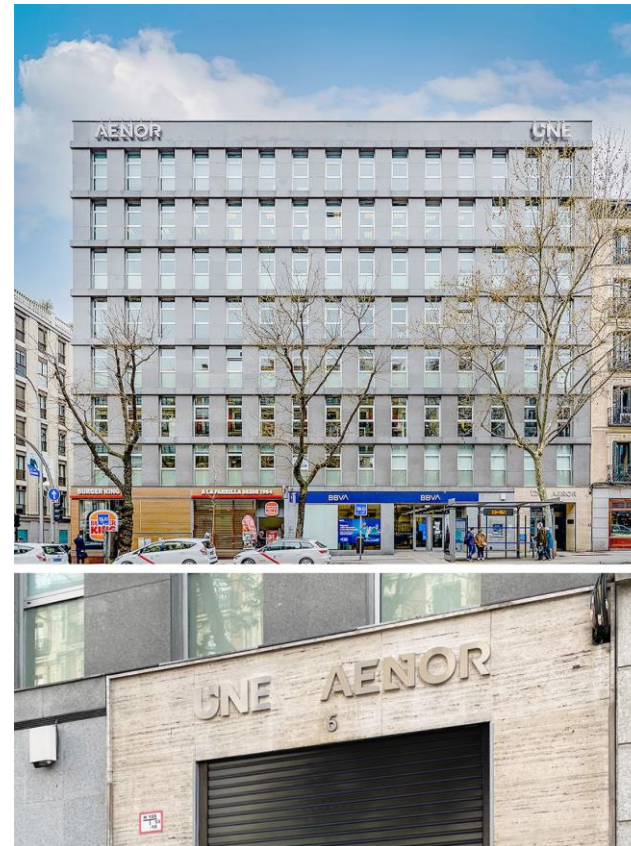


HSBooster Training Academy
Standardisation in Practice
2024-03-14

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Spanish Association for Standardization

- Non-profit, private and independent organization
- Legally designated as the Spanish National Standardization Body since 1986
- Location: Madrid
- Staff: >80 persons (60% female)
- Main activity:
 - National, European & International Standardization: 35000 standards in catalogue, 13000 experts involved...
 - Integration of standardization in R&I: >100 projects.
- Member of:



Today's Menu

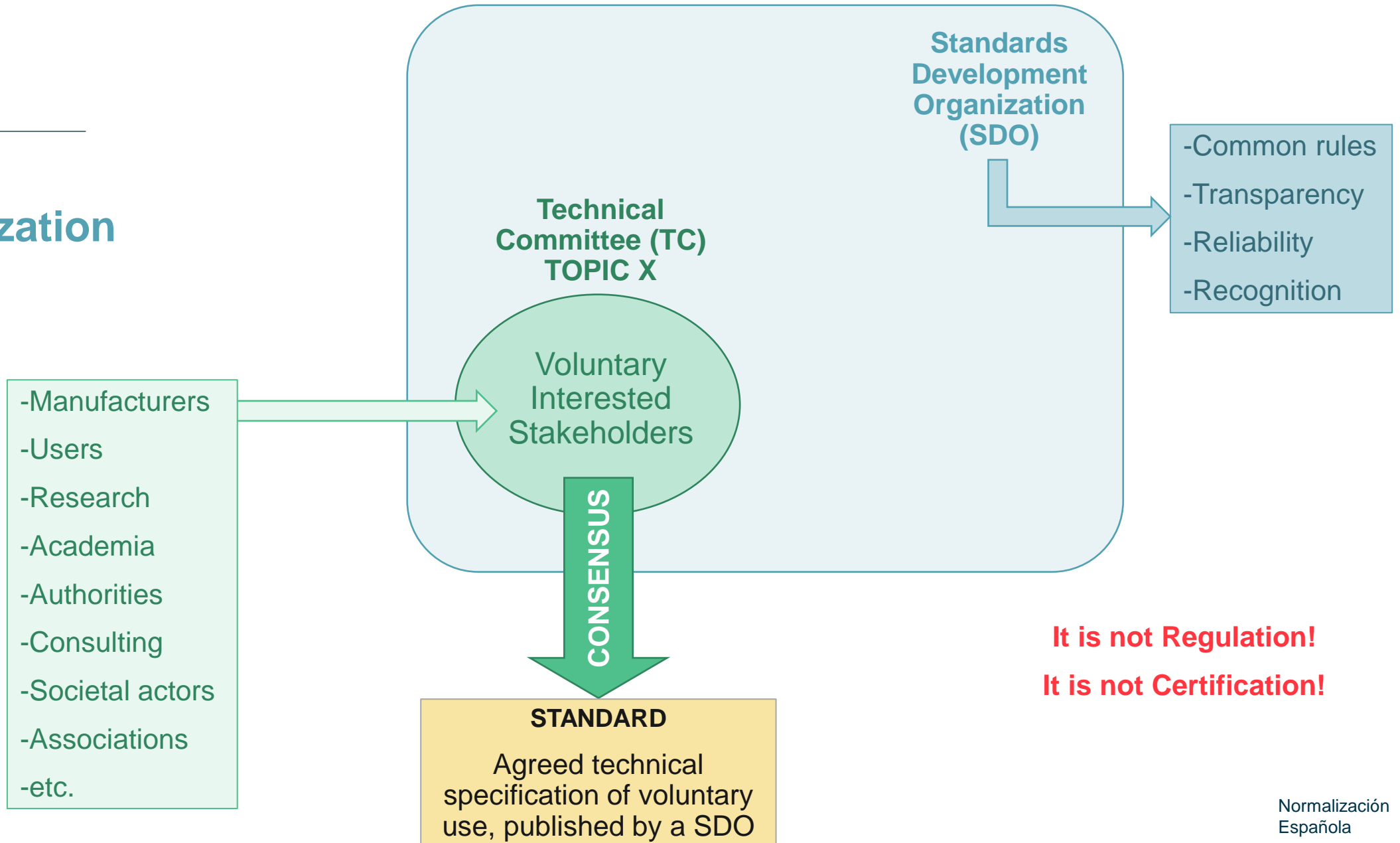
- Standardization Concept
- CWA Basics
- CWA Process
- Practical Recommendations
- Examples

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Standardization

Standardization Concept



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“Official” Standards Organizations

- Subject to European/national regulations and International Agreements (WTO)
- Common rules (except ITU-ETSI)
- Linked participation

International



www.iso.org



www.iec.ch



www.itu.int

European



www.cencenelec.eu



www.etsi.org

National (in every country)



www.elot.gr



www.din.de



www.sfs.fi



www.ipq.pt



www.une.org



www.uni.com



www.unmz.cz



www.nsai.ie



www.portail-qualite.lu

Other SDOs



ETC...

- Sectoral
- Different and own rules
- Not linked to international agreements or legal constraints
- Some of them have agreements with Official Standards Organizations

Different types of standard documents

Standard (EN, ISO, IEC, *UNE*, *DIN*, *NF*...):

- Top level document.
- Full consensus.

Technical Specification (CEN/TS, ISO/TS...):

- Less consensus or not consolidated knowledge.
- Limited duration.

Technical Report (CEN/TR, ISO/TR...):

- No requirements, informative document.

Workshop Agreement (CWA, IWA, *DIN Spec*, *Especificación UNE*, *PdR*...):

- Reduced consensus.
- Fast elaboration.

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CWA: CEN-CENELEC Workshop Agreement

CEN/CENELEC Workshop (WS) definition

- Temporary working group (not an event!).
- Open to the participation of any interested parties.
- For elaboration of CEN/CENELEC Workshop Agreements (CWA).

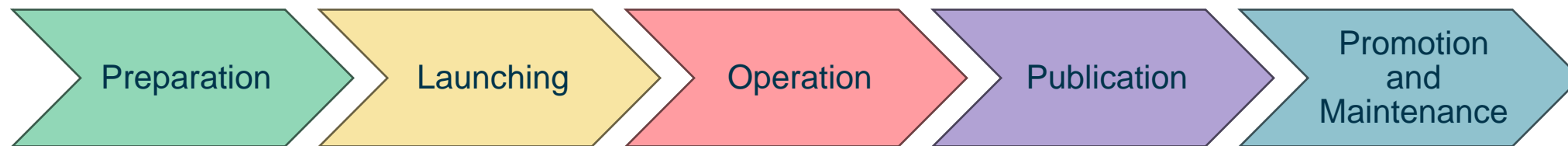
CWA definition

- CEN/CENELEC publication.
- Elaborated in a WS (out of the TCs).
- Well-fitted for emerging knowledge (R&I projects).
- Reduced consensus (just from participants).
- Fast elaboration.
- Limited duration (6 years).
- Various forms (e.g. text file or computer code).

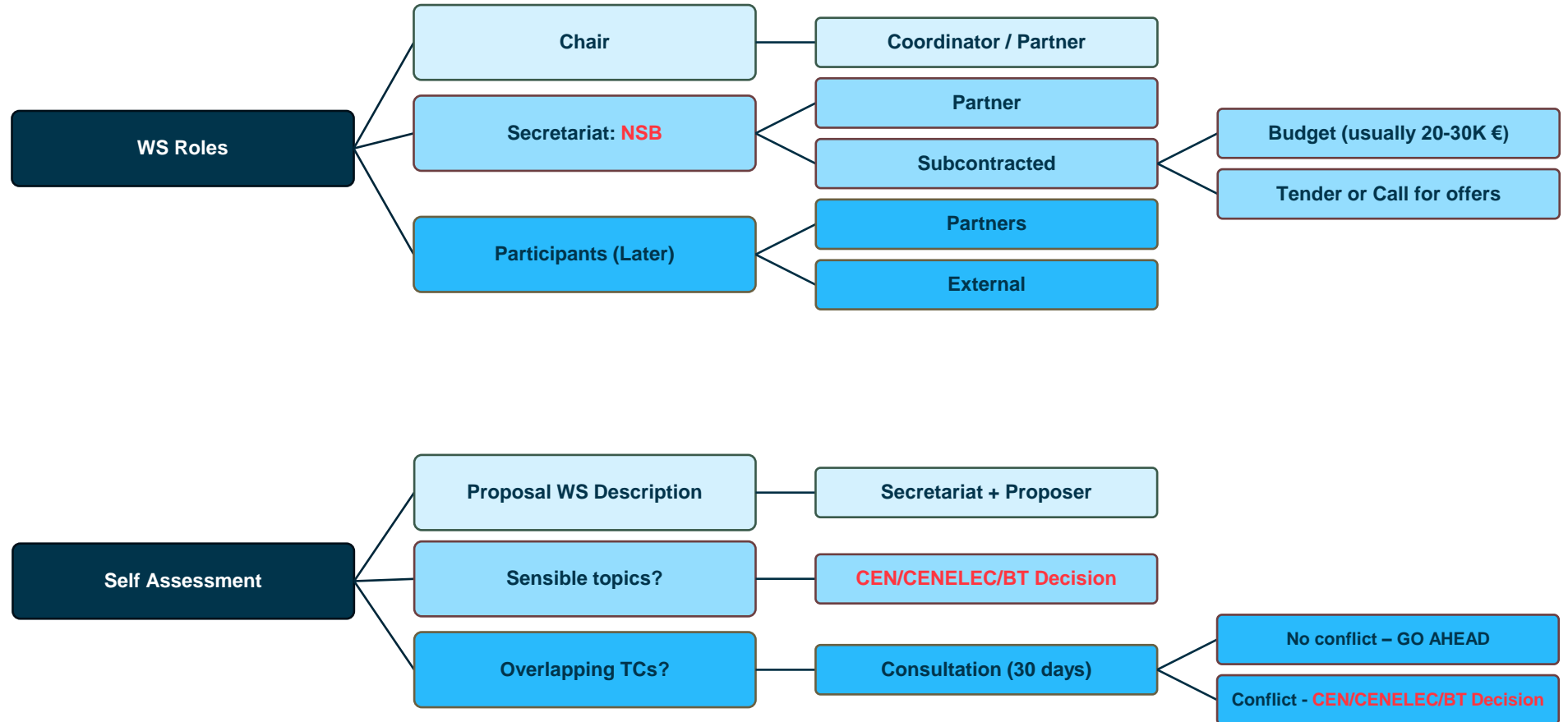
Why a CWA?

- **Impact:** Recognized reference document published outside the consortium
- **Agility:** A few months – ‘Fast Track’ standard.
- **Openness** in process and visibility to all market players.
- Suitable document to cover **new knowledge** arising from R&I activities.
- Can **test different solutions** in the market (can diverge from other CWAs)
- Can be a **first step** towards a further EN or ISO standard.

The CWA process



Preparation



Launching

If Self Assessment is positive (no conflicts):

- Secretariat triggers the process in CEN/CENELEC
- 30 days public announcement:
 - In CEN & CENELEC webpage
 - Open to comments
 - Open to appointment of external experts
 - Promotion to increase participation

Operation

WS Kickoff Meeting

- Description of the WS and expected CWA(s).
- Appointment of Chair / Secretariat.
- Appointment of WS participants: Registration Form:
 - Property of the shared knowledge: The owner.
 - Property of the published CWA document: CEN & CENELEC.

Drafting / Agreement building

- Meetings and homework until there is an agreement on the draft text.
- Inform/Consult relevant TCs.

Public web consultation (30 days)

- Optional (but recommended).
- Open to public comments.

Resolution of comments and final agreement

- Secretariat sends the final draft to CEN & CENELEC.
- CEN & CENELEC publishes the document.

Free download of the CWA:

- Payment to CEN & CENELEC for revenue losses.
- Fee: 8% of budget for WS Secretariat.
- Available in: <https://www.cencenelec.eu/get-involved/research-and-innovation/cen-and-cenelec-activities/cwa-download-area/>



Promotion and Maintenance

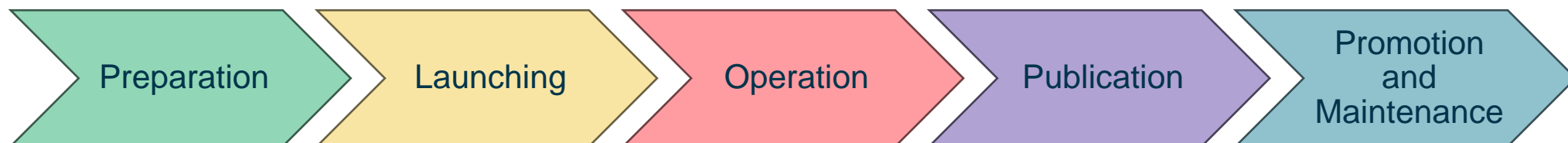
Promotion:

- Use project media to promote the CWA
- Inform to related TCs, etc.

Maintenance:

- 3 years: Consultation to the Secretariat / Chair / Participants on:
 - Confirmation
 - Review
 - Withdrawn
 - Conversion into another kind of document
- 6 years: CEN/CENELEC/BT Decision on withdrawal

Timing



Decide the topic, approach, etc – Undetermined

Subcontract a NSB – 1 month apr.

Prepare the proposal – 2 weeks apr.

Consult overlapped TCs – 1 month apr.

BT Consultation (to be avoided) – 2 months apr.

Send to CEN-CENELEC – 1 week apr.

Public announcement – 1 month

KoM – 1 day
Drafting and agreement – Undetermined

Send to CEN-CENELEC – 2 weeks apr.

Availability – 1-2 weeks apr.

Minimum: 3 months

Usual: 6-12 months

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My recommendations

Smooth the process!

Care with overlapping TCs!

- Avoid potential conflicts when:
 - Selecting the topic for the CWA
 - Selecting the approach to the topic
- Differentiate correctly:
 - TCs with overlapping scope (require consultation)
 - TCs potentially interested (should be informed)

Go to the KoM with a first draft CWA!

- Easier to understand the aim of the WS
- Saves time

Select a good topic! (1)

Possible topics:

- No safety aspects (forbidden)
- Avoid sensible topics leading to CEN/CENELEC/BT Decisions:
 - Management systems (PDCA)
 - Conflicts with existing TCs
- Examples of usual topics:
 - Terminology
 - Test methods
 - Methodologies
 - Criteria / indicators
 - Product specifications, etc.

Select a good topic! (2)

Internal considerations:

- Available information:
 - Select successful project results
 - Use existing deliverables as sources
 - Confidentiality (even if deliverables are confidential, information can be extracted – Performance, not specific details)
 - Enough time in the project for the process
- Exploitation of results:
 - A standard can support the commercialization or market uptake of a result
 - Consider IP protection strategy (e.g. patent application process)
- Standardization potential:
 - The CWA must be useful outside the project
 - Must be general (avoid direct references to the project, deliverables or results, except as examples)
 - Think on the applicability to one or more sectors

Increase the impact!

Communicate the CWA!

- Publicise initiation and publication in project media
- Include it in the list of project outcomes (even if it is not a deliverable)
- Inform the Project Officer, Advisory Board, related TCs, Associations, etc.
- Include it in the reporting as an important project outcome

Promote future use!

- Invite and try to involve TCs in the elaboration
- In case of overlapping TC, propose the CWA to be allocated to it for future maintenance
- Try to promote for future adoption as a standard in a TC:
 - Discuss with the TC during elaboration
 - Join the TC to defend the CWA and take part in other related works



Examples of projects



Success Cases



Circular Process for Eco-Designed Bulky Products and Internal Car Parts

H2020 CIRC-01-2016-2017 "Systemic, eco-innovative approaches for the circular economy: large-scale demonstration projects"

- [CWA 17806:2021](#) Design Circular Framework Setting - Composite recovery design solutions in the automotive industry
- [CWA 17807:2021](#) Dismantling methods and protocols in a Circular Economy Framework - Composite recovery in the automotive industry

Increasing resource efficiency of aviation through implementation of ALM technology and bionic design in all stages of an aircraft life cycle

H2020 MG-1.2-2015 "Enhancing resource efficiency of aviation"

- [CWA 17453:2019](#) Optimized ALM support structures made from Al alloys (Potential upgrade to ISO standard)
- [CWA 17454:2019](#) Quality control of metal ALM parts using the Ultrasonic Technique

Bifunctional Zeolite based Catalysts and Innovative process for Sustainable Hydrocarbon Transformation

H2020 CE-NMBP-24-2018 "Catalytic transformation of hydrocarbons"

- [CWA 17944:2022](#) Valorization of light hydrocarbons - One-pot method for the preparation of nanocatalysts for non-oxidative dehydrogenation (nODH) of light alkanes



Sheet metal forming testing hub

H2020 DT-NMBP-07-2018 "Open Innovation Test Beds for Characterisation"

- [CWA 17793:2021](#) Test method for determination of the essential work of fracture of thin ductile metallic sheets
- [CWA 17794:2021](#) Measurement of diffusible hydrogen in metallic materials - HELIOS 4 HOT PROBE method

Success Cases



Open Access Single entry point for scale-up of Innovative Smart lightweight composite materials and components

H2020 DT-NMBP-01-2018 "Open Innovation Test Beds for Lightweight, nano-enabled multifunctional composite materials and components"

- [CWA 17935:2022](#) Sustainable Nanomanufacturing Framework



SeaTitan

Surging Energy Absorption through Increasing Thrust and Efficiency

H2020 LCE-07-2016-2017 "Developing the next generation technologies of renewable electricity and heating/cooling"

- [CWA 50271:2021](#) Recommendations for a modular and cross-cutting Power Take-Off for wave energy direct drive linear solutions.
- [CWA 50272:2021](#) Methodology, procedures and equipment required for the laboratory testing of a modular and crosscutting Power Take-Off for wave energy converters

Success Cases



Advanced materials solutions for next generation high efficiency CSP tower systems

H2020 CIRC-01-2016-2017 "Systemic, eco-innovative approaches for the circular economy: large-scale demonstration projects"

- [CWA 17726:2021](#) High temperature accelerated ageing of advanced ceramic specimens for solar receivers and other applications under concentrated solar radiation.
- Leading the review of [ISO 18755:2022](#).
- Winner Award CEN-CENELEC **Standards+Innovation 2020**.

Augmented reality interactive educational system

H2020 ICT-25-2018-3 "Interactive technologies"

- [CWA 18006:2023](#) eXtended Reality for Learning and Performance Augmentation - Methodology, techniques, and data formats.
- Leading **ISO/IEC** and **IEEE** working groups, publishing different standards there.
- Winner Award CEN-CENELEC **Standards+Innovation 2022**.



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Thanks for your interest!

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