The process of standardisation

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WHO I AM



Maitane OLABARRIA

- representation of European SMEs in
- association)
- standardisation

 Secretary General, Small Business Standards (SBS) since January 2020 focusing on the (European+international)standardisation • Previously worked 11 years at CEN (European Committee for Standardisation) and 3 years at **CECIMO** (European Machine tool industry

• 20+ years experience in European policy &



TYPES OF STANDARDS

COMPANY STANDARDS

Internal specifications (e.g. for quality control or in-house processes)

FORA & CONSORTIA

Developed by industry groups often used in fastmoving tech sectors

FORMAL STANDARDS

Adopted by recognised standards bodies reflecting wide consensus IMPORTANCE OF MOVING FROM PROPIETARY PRACTICES TO BROADLY ACCEPTED FORMAL STANDARDS FOR SCALABILITY & TRUST



WHAT IS A STANDARD?

- A voluntary technical document designed to be used as a rule, guideline or definition.
- An agreed repeatable way of doing something.
- They can define common terminology, requirements for products and services related to safety, performance, quality, test & measurement methods, define processes to reach specific goals....
- Created by bringing together all interested parties such as manufacturers, users, users and regulators of a particular material, product, process or service.



STANDARDS & CONFORMITY ASSESSMENT

- Standards define the technical and quality requirements a product, process or service should meet.
- Conformity Assessment is how we check whether those requirements are met – through testing, inspection, certification, etc.
- **CONFORMITY ASSESSMENT CAN BE:**
 - **FIRST PARTY:** self-declaration made by manufacturer or service provider
 - **SECOND PARTY:** declaration made, for example, by the client of the supplier
 - **THIRD PARTY (e.g. certification):** declaration made by independent organisation





CLAIMS OF CONFORMITY ASSESSMENT



3rd party bodies can be accredited

Attestation type

Self-declaration of Conformity)

Contract

Certificate



WHO DEVELOPS STANDARDS?







COOPERATION BETWEEN STANDARDS BODIES



ISO & CEN also cooperate with other standards developing organisations in some specific areas (e.g. ISO cooperation with ASTM in relation to additive manufacturing)

ALLOWS FOR THE DEVELOPMENT OF COMMON EUROPEAN AND INTERNATIONAL STANDARDS



HOW TO PARTICIPATE IN CEN/ISO?



Manufacturers, users, public authorities, consumers, researchers, NGOs...

NATIONAL MIRROR COMMITTEE

Agrees on common national position



TECHNICAL COMMITTEE

PLENARY NATIONAL DELEGATIONS (Voting rights) Takes decisions





LIAISON **ORGANISATIONS**

- Without voting rights in Plenary - Can nominate experts in WG



STAGES IN STANDARDS DEVELOPMENT



ENQUIRY (prEN/DIS)

12 weeks

APPROVAL (FprEN/FDIS)

8 weeks



PROPOSAL

- **Anyone can submit a proposal** to develop a standard (or revise an existing one). Normally through National Standards Body or liaison organisations, also legislators at European level (Standardisation request)
- New work should be proposed to:
 - **Relevant Technical Committee** (TC) dealing with the subject (if it exists)
 - To the **relevant Standards organisation** (if a TC does not exist)
- Proposals are assessed and submitted to consultation among the national standards bodies (who consult national stakeholders) to assess:
 - Market relevance, need of proposed standard and stakeholder support
 - Availability of resources to be able to develop the standard
- **Forms** to submit a proposal: <u>CEN/CENELEC</u> and <u>ISO</u> (Form 4) NWI Proposal Forms, <u>CEN/CENELEC</u> and <u>ISO</u> (Form 1) new field of activity forms



ENQUIRY

- Open consultation of draft standard via National Standards Bodies
- Anyone should be able to provide feedback on adraft standard – In Europe often through national online portals where comments can also be submitted (these are normally validated by the National mirror committee before submitting it to the relevant CENor ISO Committee)
- They are then sent to the relevant Technical Committee that will review them and modify the draft standard if needed
- Enquiry is accompanied by a vote (qualified majority) to check possible acceptance of the draft --- If no technical comments are received and necessary majority achieved, the standard may then be adopted





APPROVAL AND PUBLICATION

- If the Technical Committee introduces technical **changes** into the draft standard then a Formal vote (qualified majority) on the final draft will take place
- In the case of European Standards National Standards Bodies will have to adopt the European Standard as national standard and withdraw conflicting ones;
- International Standards developed **DO NOT carry out an** obligation for National Standards Bodies to implement them as national standards





EUROPEAN STANDARDS ARE ADOPTED IN 34 COUNTRIES AS IDENTICAL NATIONAL STANDARD



REVIEW

- Standards are reviewed regularly at least every 5 years (but it can also be done earlier)
- Outcome of the review can be:
 - ⁻ Confirmation of the standard
 - Need for modification or revision
 - Withdrawal of the standard
- If a need for revision is identified the process starts from the beginning



OTHER DELIVERABLES

- But Technical Committees can also deliver other documents than European/international Standards
 - Technical Specifications (TS), used in areas under technical development or where consensus cannot be achieved yet
 - Technical reports (TR), informative nature
- These documents have a lower level of consensus than European/international Standards:
 - No need for public enquiry
 - In Europe NO adoption at national level
 - Adopted by lower qualified majority (TS) or simple majority (TR)



HARMONISED STANDARDS

- A subset of European standards
- Harmonised standards are voluntary
- Developed following a request from the European Commission
- Support implementation of European Directives and Regulations (Machinery Regulation, Pressure Equipment Directive, ATEX...)
- References of harmonised standards are published in the EU Official Journal



IF YOU FOLLOW HARMONISI STANDARDS, IT IS ASSUMED YOU MEET THE REQUIREMEN OF THE RELATED EU LAW



POSSIBLE RELEVANT TCS

ISO/TC 261 – Additive Manufacturing (works in close cooperation with <u>ASTM</u> **F42** and **CEN/TC 438**)

The main TC responsible for standardisation in additive manufacturing including terminology, processes, test methods, quality parameters, data formats...

ISO/TC 107 – Metallic and other inorganic coatings (works in close cooperation with <u>CEN/TC 262</u> "Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys" & <u>CEN/TC 240</u> "Thermal spraying and thermally sprayed coatings)

Standardises the characteristics of protective and decorative metallic and nonmetallic inorganic coatings applied to metal surfaces by electrolysis, fusion, vacuum, chemical, or mechanical means. It also develops standards for testing and inspection methods for these coatings, as well as for substrate preparation prior to deposition.



THANK YOU!

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