

Official Guide

Guideline for education and training on standards and standardisation

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1 A competence framework

1.1 General

This clause specifies the competence framework for teachers and trainers who deliver standardisation education and training in line with European values and European interests ("Stand-EUVI"). A competence framework provides a structured way to identify and describe the competences relevant for effective teaching and training in a given field. **[SOURCE: IWA 30-1:2019] [SOURCE: CWA 17974:2023]**

The framework builds on Clause 4, which distinguishes between values as normative guiding principles and interests as concrete goals, and frames standardisation education as enabling learners to understand, analyse, evaluate, and act in relation to both. The framework also reflects the growing policy emphasis on European values, resilience, innovation, participation, and strategic autonomy in standardisation and knowledge valorisation. **[SOURCE: Mosakas et al., 2025] [SOURCE: European Commission, 2022] [SOURCE: European Commission, 2023] [SOURCE: European Commission, 2024]**

The framework applies across higher education, vocational education and training, in-company training, and lifelong learning. It is compatible with learning-outcomes-based design and progression across qualification levels. The framework is consistent with the Stand-EUVI intended learning outcomes framework, which draws on the European Qualifications Framework (EQF), ISCED, Bloom's taxonomy, and related international references. **[SOURCE: Veljanova et al., 2025] [SOURCE: Europass – EQF]**

The qualification level of a course or programme does not automatically determine the level at which every standardisation-related Stand-EUVI intended learning outcome is taught. A course situated at a higher qualification level, for example a Master course at EQF level 7, may include individual standardisation components that target a lower level of competence, such as awareness or orientation (EQF levels 0–4), where this is appropriate to the learners' prior knowledge, the time available, and the role of standardisation within the course. It is therefore for the teacher or trainer to decide which competence level is appropriate for the respective standardisation element and to make this explicit in the intended learning outcomes. Teachers and trainers therefore distinguish between the overall level of the course and the specific competence level targeted for the standardisation element or Stand-EUVI intended learning outcome.

In curriculum commissions, where study plans and their internal progression are discussed, it can be important to ensure that different Stand-EUVI competence levels are appropriately distributed across the programme. This can help avoid repeated treatment at awareness level only and support a coherent progression towards higher levels of competence where relevant.

The competence of Stand-EUVI teachers and trainers consists in the ability to design, deliver, facilitate, and improve standardisation education and training in ways that enable learners to understand, analyse, evaluate, and act in relation to standards and standardisation processes through the lens of European values and European interests.

The framework defines a common core of competences while recognising contextual variation across educational settings, learner groups, disciplinary backgrounds, and professional contexts. It does not prescribe a single teacher or trainer profile, disciplinary pathway, or institutional setting.

The framework introduced in this clause:

- discusses the underlying conceptual basis;
- distinguishes between common core elements and contextual variation;
- identifies the relevant competence domains; and
- links these domains to competences relevant for teaching and training practice.

It also provides the basis for selecting and designing teaching and training methods in Clause 6.

1.2 Purpose and Scope

The purpose of this framework is to identify and describe the core competences relevant for persons who teach or train in standardisation in line with European values and European interests. The framework supports the systematic design, delivery, and development of standardisation education and training across different educational and professional contexts. [SOURCE: IWA 30-1:2019] [SOURCE: Veljanova et al., 2025]

The framework applies to:

- teachers in higher education institutions;
- trainers in vocational education and training;
- trainers in in-company learning and development; and
- facilitators in lifelong-learning and professional-development programmes.

The framework supports:

- the preparation and development of teachers and trainers;
- curriculum and programme design;
- self-assessment and quality assurance;
- interdisciplinary teaching and training teams; and
- progression across qualification levels and learning contexts.

The framework is intended for flexible use across formal, non-formal, and professional learning environments. It supports contextual adaptation while maintaining a common orientation towards European values and European interests in standardisation education and training. The framework is consistent with current European policy approaches that emphasise participation, knowledge valorisation, competence development, and the societal role of standardisation. [SOURCE: European Commission, 2022] [SOURCE: European Commission, 2023] [SOURCE: European Commission, 2024] [SOURCE: Europass – EQF]

1.3 Conceptual basis

1.3.1 General

The competence framework for Stand-EUVI teachers and trainers builds on competence-based, learning-outcomes-oriented, and value-oriented approaches to education and training in standardisation. It combines competence logic, qualification-level progression, and the integration of European values and European interests into standardisation education and training. [SOURCE: IWA 30-1:2019] [SOURCE: Veljanova et al., 2025] [SOURCE: Mosakas et al., 2025]

The framework builds on the following considerations:

- a) competence is understood as the ability to apply knowledge, skills, and attributes to

achieve intended results; this is consistent with the general competence logic used in IWA 30-1, although the present framework remains intentionally generic and adaptable across educational and professional contexts; [SOURCE: IWA 30-1:2019]

b) standardisation education in the Stand-EUVI approach is not limited to technical or procedural knowledge, but includes engagement with European values and European interests in relation to standards and standardisation processes; [SOURCE: Mosakas et al., 2025] [SOURCE: European Commission, 2022]

c) effective teaching and training requires not only subject-matter competence, but also pedagogical capability, suitable delivery choices, contextual awareness, and adaptation to learners and learning environments; [SOURCE: Veljanova et al., 2025] [SOURCE: Europass – EQF]

d) teaching and training are learning-outcomes-based and aligned with progression across qualification levels and learning contexts. [SOURCE: Veljanova et al., 2025] [SOURCE: Europass – EQF].

1.3.2 Common core and contextual variation

All Stand-EUVI teachers and trainers possess a common core of competences relevant for teaching and training on standards and standardisation through the lens of European values and European interests.

The emphasis and manifestation of these competences vary depending on:

- educational setting;
- learner group;
- disciplinary background;
- professional context; and
- relevant qualification level.

Different teacher and trainer profiles therefore contribute different forms of expertise and depth while operating within the same overall competence framework.

The framework supports contextual adaptation while maintaining a coherent common orientation across educational and professional settings. [SOURCE: European Commission, 2023] [SOURCE: European Commission, 2024] [SOURCE: CWA 17974:2023].

1.4 Competence domains

The competences relevant for Stand-EUVI teachers and trainers are organised into five interrelated competence domains:

- standardisation literacy;
- values and interests;
- pedagogical translation;
- facilitation and deliberation; and
- contextual and reflective professionalism.

The domains are understood as mutually reinforcing and are intended to support coherent and adaptable approaches to standardisation education and training across different educational and professional contexts. [SOURCE: IWA 30-1:2019] [SOURCE: Europass – EQF] [SOURCE: European Commission, 2022]

The competence domains presented in Table 1 synthesise the competence logic, learning-outcomes orientation, and values-and-interests perspective developed throughout this framework. The table is intended as an integrative overview rather than a normative taxonomy. [SOURCE: Veljanova et al., 2025] [SOURCE: Mosakas et al., 2025].

Table 1 provides an overview of the competence domains, their core focus, and their educational function.

Table 1 — Summary of competence domains for Stand-EUVI teachers and trainers

Competence domain	Core question	What the teacher or trainer is able to do	Typical progression across qualification levels
Standardisation literacy	How do standards and standardisation function in practice?	Explain what standards are, how they are developed, applied, revised, and used; relate them to regulation, conformity assessment, organisations, markets, technologies, and social practices.	From guided understanding and explanation to critical contextualisation and strategic interpretation.
Values and interests	How are European values and European interests related to standardisation?	Explain the distinction and relationship between values and interests; show how standards can embody, support, undermine, or bring them into tension; make these issues visible in teaching and training.	From recognising values and interests in examples to analysing trade-offs and making informed judgements in complex contexts.
Pedagogical translation	How is the Stand-EUVI approach translated into learning?	Formulate intended learning outcomes; select and structure content; connect abstract concepts with practical examples; align learning outcomes, learning activities, and assessment; adapt learning to learner level and audience.	From structured and guided learning design to differentiated, level-sensitive design for advanced and autonomous learners.
Facilitation and deliberation	How are tensions, trade-offs, and contested issues explored?	Moderate discussion; support analysis of tensions and trade-offs; encourage reasoned argument and reflection; create an inclusive learning environment; handle disagreement constructively.	From context-aware delivery to reflective, adaptive, and improvement-oriented professional practice across settings.
Contextual and reflective professionalism	How is teaching or training adapted responsibly to context?	Adapt teaching and training to higher education, vocational education and training, in-company training, and lifelong-learning settings; recognise disciplinary limits; collaborate with others; evaluate and improve practice; connect the European dimension meaningfully to context.	From context-aware delivery to reflective, adaptive, and improvement-oriented professional practice across settings.

NOTE The competence domains synthesise competence-based, learning-outcomes-oriented, and value-oriented approaches to standardisation education and training and are intended as an integrative framework rather than a normative taxonomy. [SOURCE: IWA 30-1:2019] [SOURCE: Veljanova et al., 2025] [SOURCE: Mosakas et al., 2025] [SOURCE: Europass – EQF].

1.4.1 Competence domain: Standardisation literacy

Stand-EUVI teachers and trainers possess sufficient understanding of standards and standardisation to teach or train credibly in context. [SOURCE: European Commission, 2022]

They are able to:

explain what standards are;

explain how standards are developed, applied, revised, and used;

identify the actors participating in standardisation;

relate standards to regulation, conformity assessment, and organisational practice; and

explain how standards shape technologies, markets, infrastructures, organisations, and social practices. [SOURCE: Veljanova et al., 2025]

The required depth varies according to educational setting, learner group, professional context, and qualification level. The competence domain supports the connection between teaching and training activities and actual standards practice. [SOURCE: IWA 30-1:2019]

1.4.2 Competence domain: Values-and-interests

Stand-EUVI teachers and trainers understand the distinction and relationship between European values and European interests and are able to teach standardisation through this lens. [SOURCE: Mosakas et al., 2025] [SOURCE: European Commission, 2022]

They are able to:

- explain European values as normative guiding principles;
- explain European interests as concrete and context-dependent goals;
- show how standards can embody, support, affect, or undermine values and interests;
- identify tensions and trade-offs between values and interests; and
- relate these issues to standards, standardisation processes, and their societal implications. [SOURCE: European Commission, 2023] [SOURCE: European Commission, 2024]

This competence domain is central to the Stand-EUVI approach. Values and interests are distinct but interrelated, and standardisation education and training enable learners to recognise, analyse, and address their relationship in practice. [SOURCE: Veljanova et al., 2025]

The expected depth and complexity of analysis vary according to qualification level, educational setting, and professional context. [SOURCE: Europass – EQF]

1.4.3 Competence domain: Pedagogical translation

Stand-EUVI teachers and trainers are able to translate the Stand-EUVI approach into meaningful, level-appropriate, and context-sensitive learning and training activities. [SOURCE: Veljanova et al., 2025] [SOURCE: Europass – EQF]

They are able to:

- formulate intended learning outcomes;
- select and structure relevant content;
- connect abstract concepts with practical examples and real-world cases;
- choose suitable teaching and training methods;
- align intended learning outcomes, learning activities, and assessment; and
- adapt content, progression, and delivery to learner level, background, purpose, and context. [SOURCE: CWA 17974:2023]

This competence domain supports the integration of European values and European interests into educational and training design rather than treating them as isolated additions to standardisation teaching. [SOURCE: Mosakas et al., 2025]

For lower or intermediate qualification levels, teaching and training place greater emphasis on guided understanding, recognition, and application in familiar contexts. For higher qualification levels, they place greater emphasis on critical analysis, evaluation, autonomous judgement, and responsible participation in complex or unfamiliar contexts. [SOURCE: Europass – EQF] [SOURCE: Veljanova et al., 2025]

1.4.4 Competence domain: Facilitation and deliberation

Stand-EUVI teachers and trainers are able to facilitate dialogue, reflection, and constructive engagement with contested questions in standardisation. [SOURCE: Mosakas et al., 2025] [SOURCE: European Commission, 2024]

They are able to:

- moderate discussion across disciplinary and professional perspectives;
- support learners in analysing tensions and trade-offs;
- encourage reasoned argument, reflection, and participation;
- create an inclusive and respectful learning environment; and
- handle disagreement constructively and responsibly. [SOURCE: European Commission, 2023]

This competence domain supports learners in engaging with standardisation as a field in which values and interests may reinforce one another but may also come into tension. It also supports participation-oriented and deliberative approaches to learning and knowledge valorisation. [SOURCE: European Commission, 2024] [SOURCE: Mosakas et al., 2025]

The expected degree of learner independence in discussion, deliberation, and judgement varies according to qualification level, educational setting, and professional context. [SOURCE: Europass – EQF] [SOURCE: Veljanova et al., 2025]

1.4.5 Competence domain: Contextual and reflective professionalism

Stand-EUVI teachers and trainers are able to adapt their teaching and training to different settings, learner groups, professional purposes, and institutional contexts. They also reflect critically on their own practice and its relevance for standardisation education and training. [SOURCE: IWA 30-1:2019] [SOURCE: CWA 17974:2023]

They are able to:

- adapt teaching and training to higher education, vocational education and training, in-company training, and lifelong-learning settings;
- recognise the limits of their own disciplinary perspective;
- collaborate with other experts where useful;
- evaluate and improve their own teaching and training practice; and
- connect the European dimension meaningfully to the concrete learning or training context. [SOURCE: European Commission, 2022] [SOURCE: European Commission, 2023]

This competence domain supports responsible enactment of the framework across contexts while maintaining awareness of contextual adaptation, interdisciplinary cooperation, and the broader role of standardisation in European policy, innovation, and knowledge valorisation. [SOURCE: European Commission, 2022] [SOURCE: European Commission, 2023] [SOURCE: European Commission, 2024].

1.5 Generic descriptors

The following generic descriptor categories may be used to support the description, organisation, and communication of competences within the framework:

- understands;
- is able to; and
- demonstrates.

These descriptor categories support a simple and adaptable description of competences across different educational settings, qualification levels, and professional contexts.

They are intended to complement the competence domains described in 1.4 rather than to introduce an additional competence structure. [SOURCE: IWA 30-1:2019] [SOURCE: Europass – EQF]

The descriptor categories may be used for:

- curriculum and programme planning;
- professional development;
- trainer preparation;
- self-assessment;
- quality assurance; and
- progression across qualification levels and learning contexts. [SOURCE: Veljanova et al., 2025] [SOURCE: CWA 17974:2023]

NOTE The use of generic descriptors supports consistency and comparability while avoiding excessive fragmentation into highly detailed competence items.

1.6 Use of the framework

This framework serves as a reference for the preparation, support, and development of Stand-EUVI teachers and trainers across different educational and professional contexts. It supports coherent and adaptable approaches to standardisation education and training in line with European values and European interests while allowing for contextual adaptation, disciplinary diversity, and progression across qualification levels. [SOURCE: European Commission, 2022] [SOURCE: European Commission, 2023] [SOURCE: Europass – EQF]

The framework may be used:

- to support curriculum and programme development;
- to guide teacher and trainer preparation;
- to support interdisciplinary teaching and training teams;
- to support self-assessment and quality assurance; and
- to facilitate progression across learning contexts and qualification levels. [SOURCE: Veljanova et al., 2025] [SOURCE: CWA 17974:2023]

The framework also provides a basis for selecting and designing suitable teaching and training methods, as discussed in Clause 6.

1.7 Informative examples

Illustrative examples of how the competence domains may be enacted in different educational and training settings are provided in Annex A. The examples support interpretation and implementation of the framework across higher education, vocational education and training, in-company training, and lifelong-learning contexts. **[SOURCE: CWA 17974:2023]**

The examples are informative in nature and are intended to illustrate possible applications of the framework rather than prescribe specific teaching or training approaches.

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For inline use:

[SOURCE: European Commission, 2022]

[SOURCE: European Commission, 2023]

[SOURCE: European Commission, 2024]

[SOURCE: Veljanova et al., 2025]

[SOURCE: Mosakas et al., 2025]

[SOURCE: Europass – EQF]

[SOURCE: IWA 30-1:2019]

[SOURCE: CWA 17974:2023]

Annex A (informative)

Illustrative examples for the competence framework – EUVI, personas, and domains

A.1 Equality, inclusion, and the “norm person”

A teaching case may invite learners to examine the implicit assumptions behind a supposedly standard user profile and to ask who is excluded or disadvantaged by such assumptions. This kind of case can be used to address equality, inclusion, accessibility, and bias in standard-setting and to explore how European values may be translated into technical or procedural requirements.

A.2 Drafting a standard and identifying omissions

Learners may be asked to draft a standard or standard-like text and then to identify what may be missing. This can reveal hidden assumptions, neglected stakeholders, missing accessibility requirements, or insufficient attention to sustainability, safety, or protection. The exercise combines standardisation literacy with reflective critique.

A.3 “Red lines” and total surveillance

A teaching or training case may use an intentionally provocative example, such as total surveillance, to explore limits set by dignity, freedom, democracy, privacy, and the rule of law. Such a case can help learners identify when technical possibilities or resilience claims may conflict with fundamental rights and democratic principles.

A.4 Standardisation as a strategic issue in-company

In-company training may use a case that treats standardisation in line with European values and European interests as a strategic organisational issue rather than only a compliance task. Such a case can connect standards to competitiveness, resilience, sustainability, and responsible innovation, while also addressing trade-offs and organisational responsibility.

A.5 Philosophy or ethics input linked to standards practice

A guest lecture, short video sequence, or structured discussion from a philosophy or ethics perspective may be used to introduce or deepen reflection on values and interests. Such input should be explicitly linked to standards practice and should not remain purely abstract.

A.6 Scenario work and table-top exercises

Where the intended learning outcomes concern analysis, application, or balancing of competing considerations, scenario-based discussion or table-top exercises may be used. These methods allow learners to move from theoretical understanding to contextual judgement and collaborative problem-solving.

A.7 Philosopher or ethics lecturer in higher education

A philosopher or ethics lecturer may focus particularly on conceptual clarification, ethical reasoning, and the analysis of tensions between values and interests. Such teaching may be especially suitable for exploring human dignity, freedom, equality, democracy, and the rule of law in relation to standardisation. To remain within the Stand-EUVI approach, such input

should be linked explicitly to standards practice, for example by discussing accessibility standards, AI-related standards, or privacy-by-design requirements.

A.8 Neuropsychologist or human-factors specialist

A neuropsychologist or human-factors specialist may focus particularly on cognition, perception, behaviour, usability, accessibility, and inclusion. Such teaching may be used to examine how standards affect real users, how implicit assumptions shape design, and how safety, trust, and protection can be translated into requirements. This perspective can be especially useful where standardisation relates to digital systems, human-machine interaction, or the design of services and environments.

A.9 Lawyer or legal scholar

A lawyer or legal scholar may focus particularly on the relationship between standards and legislation, the rule of law, legal certainty, access, conformity assessment, and rights-based constraints. Such teaching may be used to clarify how standards interact with EU law and policy, how legal and procedural safeguards shape standardisation, and how values such as democracy, equality, and human rights can be addressed in standardisation-related governance.

A.10 Engineer or technical specialist in in-company training

An engineer or technical specialist delivering in-company training may focus particularly on implementation, interoperability, product development, compliance, certification, and strategic standardisation. Such teaching may be especially suitable for linking standardisation to competitiveness, resilience, sustainability, and responsible innovation. To remain within the Stand-EUVI approach, the training should not be limited to efficiency or compliance alone, but should also make visible the relevant value implications and trade-offs.

A.11 Economist, management scholar, or innovation specialist

An economist, management scholar, or innovation specialist may focus particularly on market access, competitiveness, innovation diffusion, organisational strategy, and value creation. Such teaching may be used to show how standardisation supports industrial development and strategic autonomy, while also requiring reflection on tensions with environmental, social, and rights-based objectives. This perspective can be especially useful in executive education, policy-oriented programmes, and in-company learning.

Annex B (informative)

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