SEREN4 INFORMATION SHEET

STANDARDS and H2020 projects

Short practical remarks on standardisation in H2020 Projects

Standards are based on the consolidated scientific results, technology used and the experience of experts in the respective fields. They represent previously agreed rules, guides or characteristics of processes and their results, and reflect the current state of the art. Nowadays, standards are not only created for technical reasons, but also to ensure interoperability in growing markets across industries.

European standards are a key part of the European single market. Despite being rather technical and often unknown to the public, they are one of the most important resources for stakeholders. Considered boring or irrelevant by some organizations, they are in fact crucial for trade facilitation and are therefore very important for security practitioners. Standards equal a common language for mutual understanding, and represent a specification of a model or a technical solution based on which it is possible to collaborate. Standards help to protect users and business interests.

Why deal with standards in a research project?

Addressing standardisation in your proposal may lead to a higher impact of the project results. This may in turn contribute to a higher rating during the proposal evaluation stage, and increase the chances of proposal financing.

Identify the standardisation potential of your project!

Taking into account existing standards or developing a new standard by your research project can guarantee that your innovative result (product or service) will have a better market application and market uptake. Translating research results into standards facilitates the market validation and the market uptake of innovations, and creates better opportunities for potential public procurement.

What is a Standard?

CEN-CENELEC webpage

A standard is a document that sets out requirements for a specific item, material, component, system or service, or describes in detail a particular method or procedure. Standards are developed by experts, established by consensus and approved by a recognized body. Standards are voluntary which means that there is no automatic legal obligation to apply them, however, laws and regulations may refer to standards and even make compliance with them compulsory. Standards are accessible to the public, and are meant to ensure comparability, compatibility and interoperability.

Based on this description, standardisation is a way to ensure your research results or products' consistency as you scale-up and grow into different markets.

What is a standard?

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When to include standardisation activities in a project?

- The following phrases in the call text are a clear hint that you should address standardisation in your project:
  - standardisation activities, support or contribution to standard setting, etc.
  - compatibility, replicability, interoperability, market access etc.;
- If you intend to bring results to the market;
- If your results need to be compatible and interoperable with products, systems or services already on the market;
- If your results (products or processes) are of public procurement interest;
- If you need to comply with existing regulation and certification;
- If you need to analyse existing standards to determine the state of the art;
- If you want to get higher professional recognition – e.g. references to relevant standards will increase the quality of your publications;

Contribution to new standardisation does not mean publishing a new standard. Even in a basic research project (TRL1-3), it is possible to contribute to standardisation by identification either one of the existing standards, or those currently under development, to identify the standardisation gaps. In the applied research and demonstration projects (TRL4-7) cooperation with existing Technical Committees is recommended.
Our recommendation is to consult with an expert for standardisation in the respective field (or National standardisation body) on your project ideas and/or innovation intention, or to visit the European standardisation bodies www.cencenelec.eu portal and read the already published guides for research and innovation.
The European Standardisation Organisation - CEN-CENELC brings together national standards agencies of 34 countries and more than 60,000 technical experts, and provides a platform for the development of European Standards and other technical specifications across a wide range of sectors. After the publication of the European Standard , each conflicting national standard in any of the 34 countries has to be withdrawn.

Standardisation Levels

There are three main levels of standards:

- National Standards – developed and published by National Standardisation Organisations.
- European Standards - developed and published by the European Standardisation Organizations: the European Committee for Standardisation (CEN), the European Committee for Electrotechnical Standardisation (CENELEC), and the European Telecommunications Standards Institute (ETSI).
- International Standards - developed and published by the international standards organizations: the International Organization for Standardisation (ISO), the International Electrotechnical Commission (IEC), and the International Telecommunication Union (ITU). International standards are especially valuable as a means to facilitate trade between different countries.

How to get started

How to get started:

Developing a new standard involves creating a CEN-CENELEC Workshop Agreement (CWA), which is a specific document designed for R&I projects and that forms the basis for new standards. Drafting time is about 6-12 months, after which your CWA could be further developed into a European standard or integrated into an existing one.
Standardisation activity in the research and innovation project is mostly to organise a standardisation workshop and to reach a Workshop Agreement. One example of such activity is a demonstration done by the project DRIVER+ (Driving Innovation in Crisis Management for European Resilience).

Driver+ project

Standardisation steps/types of standards:

CWA – CEN Workshop agreement

1. CEN Workshop agreement (CWA) – for most of the RIA and IA projects, the contribution to CWA workshop/agreement is the highest step in standardisation activities. A CWA is an agreement developed and approved in a CEN Workshop; the latter is open to the direct participation of anyone with an interest in the development of the agreement. There is no geographical limit on participation; hence, participants may be from outside Europe as well. The development of a CWA is flexible and on average it takes 10-12 months. A CWA does not have the status of a European Standard, and involves no obligation at national level. A CWA may not conflict with a European Standard; if a conflicting EN standard is subsequently published, the CWA shall be withdrawn.

Technical report

2. Technical Specification (TS) – is a normative document, the development of which can be envisaged when various alternatives that would not gather enough as to allow an agreement on a European Standard (EN).

Technical specification

3. Technical Report (TR) – is an informative document that provides information on the technical content of standardization work.

4. European Standard (ES) – is a document that provides rules, guidelines or characteristics for activities or their results, for common and repeated use.

European standard

List of National Standardisation Bodies

CEN members, organisations suitable to be a project partner if wider standardisation activity is expected.

List of NSB