

Standardization in Innovative projects

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*Standardization
in R&D and Innovation projects
adds value to projects results and
favours competitiveness of their industrial partners*

To improve the competitiveness of products and services in international and national markets, it is necessary to establish a minimum set of requirements.

Technical standards provide the requirements and conditions in order for the products to be marketed.

Technical standards harmonize the classification of a product or service allowing their eventual certification through a compliance verification process with them of a product or service for the protection and support of:

- users-consumers of products and services
- producers of products and services.

This allows the increase of competitiveness of a given community at international level.



In order to profitably commercialize products and services, a “must” is to guarantee their conformity with “recognized” standards.

Standardization means better quality and more competitive products and services.

ENR provides its services to help during the entire standardization process and, therefore, it helps market growth

ENR is a private non-profit organization supervised by Italian Public Authorities.

ENR ensures a correct and smooth transition between R&D and Innovation project results and their possible commercialization.

Most relevant issues of ENR's mission

- ENR harmonizes and reduces language, cultural and technological barriers
- ENR helps private companies to categorize products and services
- ENR acts for international and national exchanges in the marketplace.

ENR operating sectors

- Marine-Maritime ICT sector

ENR's high-level education role in Innovative Ph.D. of Industrial nature Programs

- Healthcare ICT sector

- Cloud Services in the *e-government* of the Public Administration (PA) sector

- **Critical Infrastructure sector**

- Technologies for Cultural Heritage sector.

How ENR works

- **Identification** of the need for standardization of a specific target-use
- **Collection** of preliminary experiences from the identified target-use
- **Identification and formulation** of general guidelines related to the target-use
- **Setting-up** of a Technical Committee of users manufacturers and regulatory public and private institutions of the product/service to be standardized
- **Writing-up** of a first draft standard (of a voluntary nature)
- **Publication and presentation** of the first draft version of the standard, while raising awareness and obtaining feedback on the net
- **Promotion and dissemination** of content and use of the standard
- **Training** of potential users of the standard in different types of the target-use.

ENR also standardizes **promotion and training** in different locations:

- the University of Genoa
- the University of Palermo
- the International Telematic University UNINETTUNO in Rome

ENR **promotes** a high level of education and scientific research by participating in the Industrial Innovative **Ph.D. Program** as promoted by the Italian Ministry of Public Education, University and Research (MIUR)

ENR **helps** to carry out all the activities in the standard production chain as a preliminary requirement to the certification process.

ENR's potential contribution to the ECO-BINDER Project

ENR is available to offer its know-how and possible *support for the standardization chain of the new material formulations, as results delivered by the ECO-BINDER project* and, more in general, for the ECO-BINDER context.

ENR is in contact with the *Research Group of Excellence in Material Science at the Engineering Department of the University "Roma Tre"*, funded by Prof. Ing. Fabio Carassiti (Prof. Ing. Edoardo Bemporad and Prof. Ing. Marco Sebastiani).

Thanks to the collaboration with such Research Group, ENR is also available to *give contribution to further development of ECO-BINDER project's new delivered materials*, in particular focusing on materials capable of intelligent energy storage.

ENR's recent success cases (1/2)

«RTA – Rendimento Tecnologico Aziendale» : Company Technology Performance 2015-2016

- The production of the standard of a voluntary nature entitled “**ENR-CeRITT 12001 Requirements for a Management System for Innovation: Sistemi di gestione per l’innovazione – Requisiti**” in collaboration with the University of Naples (Lab. L.U.P.T.) and the Italian Ministry for Economics and Development (MISE)
- The purpose was the analysis and **evaluation/scoring** by using algorithms to **measure the performance of Innovation in a company** according to a given metric
- The standard has been presented to the Italian Ministry for Economics and Development (MISE).
- **Time scale: 6-12 months to reach approval.**

ENR's recent success cases (2/2)

«LAS – Liste di Attesa Sanità»:

Healthcare services waiting list management 2016 – 2017

- The production of the standard of a voluntary nature entitled “**ENR 13001 – Requirements for a Management System for prioritizing hospital waiting lists for planned operations: Sistema di gestione prioritizzato di liste di attesa per l’accesso al ricovero ospedaliero in regime di elezione – Requisiti**”
- The purpose was to prioritize healthcare waiting lists based on algorithms for the planned admission of patients to hospital in the surgical domain. This was a **Regional project co-funded by the Italian Ministry of Health and the Liguria Region**. Currently already implemented in Italy at the Pediatric Hospital «**Bambino Gesù**» in **Rome** and at the «**Galliera Hospital**» in Genoa and, abroad, in **London, UK**.
- **Time scale: 6-12 months to reach approval**

Main barriers in the standardization process of R&D and Innovation projects

- technological innovation (i.e. ICT, nanotechnology and biotechnology) moves relatively quickly
- the standardization process calls, instead, for lengthy time-frames (i.e. lengthy periods of discussion before obtaining consent)



This results in a imbalance in the equilibrium between the time constraints imposed by the technological evolution and the standardization process, in front of strong demand from innovative enterprises in order to improve their competitiveness thanks to the results achieved by their own innovative projects

How ENR overcomes the barriers in the standardization process of R&D and Innovation projects

ENR aims to overcome such issues by:

- immediately intervening with a preliminary and temporary action to compensate for the imbalance between the speed of technological evolution and the speed of standardization, while focusing on the achievement of increasing the margins of competitiveness of the involved enterprises, especially with regard to **Small and Medium Enterprises (SMEs)**
- avoiding the production of standards which, possibly in becoming obsolete, could even slow down the manufacturing process.

Main benefits in the standardization process of R&D and Innovation projects

ENR can contribute to benefits by:

- its unique way in **intervening with a fast, preliminary and temporary action** to provide **non-binding voluntary standards** which can support an innovative project certification of the competitiveness on the market for the innovative project industrial partners, which is a necessary requirement for eventual certification of the results achieved by the innovative project itself. This ends up in a factor of competitiveness on the market for the innovative project industrial partners
- **accelerating** technological innovation, which successfully guarantees a **standardization process** whilst maintaining the necessary high level of competitiveness of the identified target use by the innovative project
- offering the best **guarantee of a complete standardization process** in terms of products, processes and services for all target- uses and, at the same time, by obtaining the highest margins of competitiveness for the manufacturers and providers of the same products, processes and services
- intervening in the process of production and promotion of technical rules in the present market globalization phase, acting as an enabling factor to **defend and support the users-consumers of products and services** (with regard to values such as health, safety and environmental protection) as well as **the producers of the same products and services**, not only as a safeguard in the case of unfair competition because of non-compliant products or processes, but also for their better positioning in the international market.

Conclusion

In conclusion, if properly carried out with regards to procedure and timing



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Thank you for your kind attention!