



# Standardization in research and innovation projects

Success story: **green construction**

## **DURABROADS:**

Cost-effective DURABLE ROADS by green optimized construction and maintenance is a three and a half years FP 7 (7<sup>th</sup> European Research Framework Programme) project running from October 2013 to March 2017, with the aim to create more resilient, durable, safer, greener and cost-effective road pavements through the development of new technologies and materials.

<http://durabroads.eu/>

## **THE PROJECT**

Nowadays, traditional road materials, procedures and techniques need to increase performance but unexpected new problems have a negative impact reducing their life-time.

Challenges such as extreme weather conditions due to climate change, or the significant increase of traffic flow in new freight corridors contribute to the deterioration of the road network. Consequently, pavement performance and resilience must be considered when designing and maintaining roads to avoid increase of upgrade works, reduction of the network availability and, as well, a need for additional and costly investment.

The objective of DURABROADS is the design, development and demonstration of cost-effective, eco-friendly and optimized long-life roads, more adapted to freight corridors and climate change by means of innovative designs and the use of new green materials improved by nanotechnology. In line with the EU strategy for international cooperation, the project will also establish major research collaboration links with the US Federal Highways Administration.

## **STANDARDS: A SOLUTION FOR MARKET UPTAKE**

DURABROADS will develop innovative techniques and materials improved by nanotechnology. Identification of outcomes suitable for pre-standardization will be important for the project in order to facilitate its market implementation and to remove potential trade barriers.

Standardization activities will therefore play a key role during the lifetime of the project combining know-how developed by all partners with technical expertise in standardization from specialists involved in CEN/TC 227 on Road Materials.

 When drafting the proposal, partners agreed unanimously that it was necessary to identify potential standardization areas in order to facilitate its business implementation 

## HOW WILL THE STANDARDIZATION WORK BE DEVELOPED?

The Project has focused on the identification and evaluation of existing constraints on materials and techniques during its first months. In parallel, partners have developed and characterised graphite-modified binders to be used in the new asphalts. After only one year of activity, it is too early to identify which bitumen will be suitable for standardization. However close links with CEN/TC 227 will address upcoming needs in due time.

## BENEFITS OF LINKING WITH STANDARDIZATION

A main challenge for the consortium is the successful market implementation of the project's results. The project therefore contains a specific task to develop pre-standardization activities for the new DURABROADS materials in order to ensure an effective and business-oriented implementation of the research outcomes.

## LONG-TERM EXPECTED IMPACT

The consortium will elaborate guidelines and recommendations detailing procedures for the production and utilization of the new materials and techniques identified during the project. In addition, a guideline for introducing DURABROADS concepts in Green Public Procurement processes will be elaborated.

Also, partners will produce specific recommendations to explore the future standardization of DURABROADS materials facilitating their circulation within the EU and hence ensuring a long term impact of the project results.



□□ The project aims to be in line with the new Public Procurement Directive promoting innovative materials and techniques to improve the road sector. In addition, the identification of a standardization roadmap for new DURABROADS products will facilitate its real market implementation. □□

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[www.cencenelec.eu/research](http://www.cencenelec.eu/research)



Every project is different. The CEN-CENELEC Research Helpdesk can provide you with advice on how to include standardization in your project. Please feel free to contact us!

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