

Project INFRACOMS: Innovative & Future-proof Road Asset Condition Monitoring Systems

Effective and efficient road asset management relies on the availability and timely exchange of information to support robust decisions on maintenance needs. In recent years there has been significant progress in the development of technology, providing the opportunity to improve and enhance asset management decisions through the use of new sensing technologies for data collection, and advanced techniques in data processing to convert data into information to enrich asset management systems. These new technologies, such as remote sensing, satellite monitoring, crowdsourcing, V2I/I2V communications, advanced data processing and Internet of Things (IoT) etc. are now gradually making their way into asset management within road administrations. This presents a number of challenges for current and future asset management processes.

With this rapid technological changes, National Road Authorities (NRAs) face considerable challenges: **Understanding** which technology or set of technologies will add value and bring efficiency in managing their assets; **interpreting** the data in an efficient and robust manner that meets their asset management objectives; **integrating** the data with suitable visualisation and decision support tools; and **evaluating** the wider implications of adapting these technologies in terms of cost, safety, social and environment components.

To find a practical solution to these challenges and enable European National Road Authorities (NRAs) to implement innovative technologies and approaches as standard practice, Conference of European Directors of Road (CEDR) have called for research in 2021 with a specific focus on two primary asset types: road pavements and bridges.

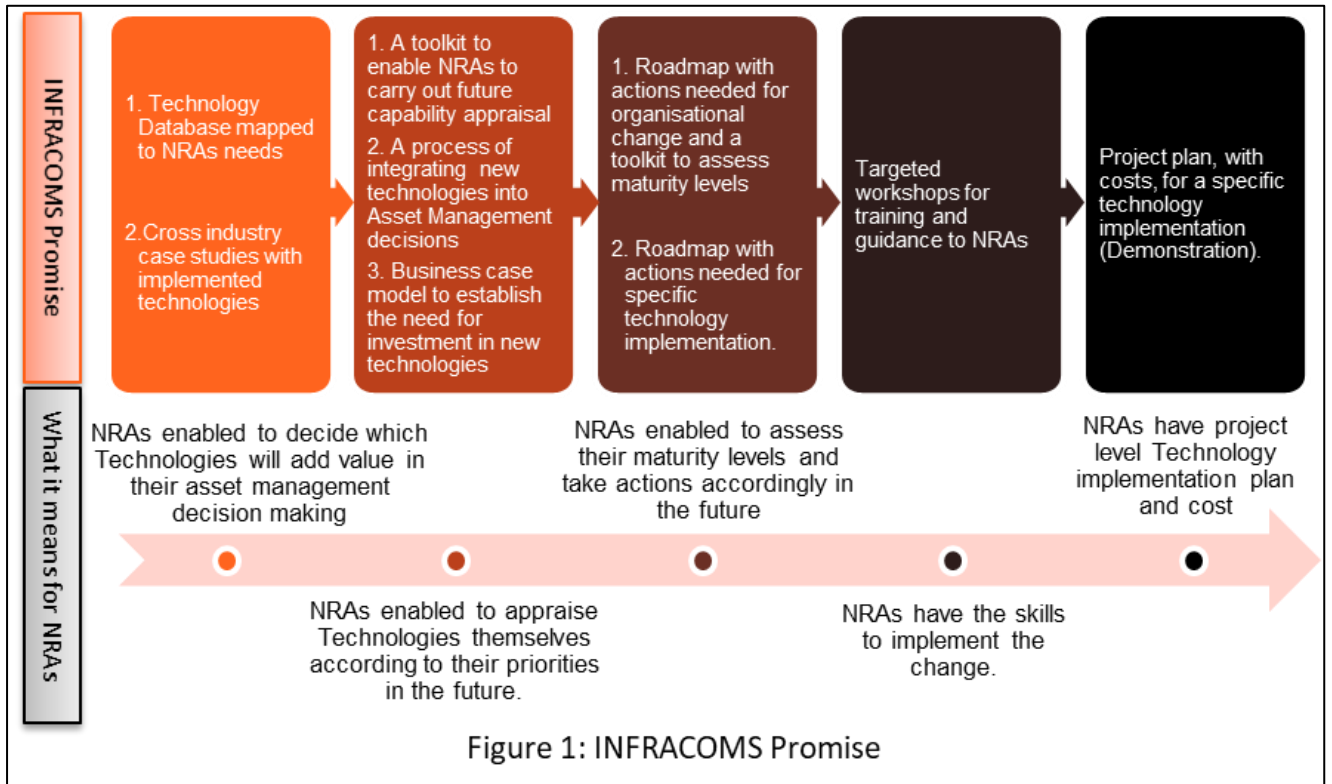
Project INFRACOMS, a two year long project, will be undertaken by 7 consortium partners, promise to support NRAs to transform their ability to realise the benefits of these new technologies.

INFRACOMS aims to deliver:

Technology Database 4.0: INFRACOMS will provide NRAs with an openly accessible database of remote monitoring technology, appraised in terms of its technical capability and application so NRAs can understand and implement new and emerging technologies that will add value to their asset management processes.

Appraisal Toolkit: INFRACOMS will also provide a flexible, sustainable and future-proofed appraisal toolkit which will enable NRAs to continue to appraise emerging technologies.

Roadmap for implementation and maturity assessment tool: INFRACOMS will also provide an action plan, in the form of a Roadmap, to support the planning for, and implement of, these technologies within road administrations.



Consortium Partners:



Belgian Road Research Centre
Together for sustainable roads



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