

# CEDR DROIDS project description – What is DROIDS?

## Digital Road Operator Information and Data Strategy (DROIDS)

**DROIDS** is a CEDR Transnational Road Research Programme Call 2022 project aiming to provide the National Road Authorities (NRAs) increased knowledge and support to reap optimal benefits from digitalisation as they evolve to become digital road operators operating the physical, operational and digital road infrastructures. As digital road operators, the NRAs will provide better road user services while improving road transport's safety, efficiency and sustainability.

The background of the research is the ongoing transformation of the National Road Authorities (NRAs) to digital road operators responsible for operating both the physical and digital road infrastructure. Some NRAs have already developed their processes and services accordingly, while some are still reflecting on the developments and discussing the transformation.

First the project will look at the evolving roles of the NRAs as they transform themselves into digital road operators. Special focus is given to new roles brought by digital road operation while changes foreseen about the existing roles are addressed. DROIDS pays specific attention to the role evolution in different CEDR member countries with currently varying roles and digital maturity.

Secondly, the project studies the evolution of digital twins from road data banks to comprehensive real-time digital twins of the road transport system, including the infrastructures, traffic, land use, road environment etc. Here, the integration of the digital twins with the processes in the NRA core business and tasks is assessed in a thorough manner.

Thirdly, trust has been identified as the key attribute for NRA-originated data/information concerning its use by private sector stakeholders such as vehicle manufacturers and service providers. Thereby DROIDS also highlights the issues related to ensuring trust and security in the maintenance, sharing, and use of the digital road infrastructure.

Finally, the work of DROIDS concludes in the production of an overarching data strategy for the physical and digital road operators taking on board the results from DROIDS and other ongoing projects (such as CEDR Data Call 2022 PRESORT and TIARA projects).

## Expected achievements and benefits to NRAs:

- DROIDS offers NRAs a clearer understanding of the prerequisites and roles associated with becoming a digital road operator, vital for NRAs considering this transition.
- It emphasizes the crucial step for NRAs: adapting processes to maximize benefits from digital tools.

- While DROIDS provides insights for process adaptation, the actual implementation must align with each NRA's unique digital and organizational maturity.
- The project results will outline specific recommendations regarding actions and roles tied to HD maps, electronic traffic, and transport regulations, aiding NRAs in decision-making.