

Coordination of national efforts in modernizing transport infrastructure and provision of innovative mobility services

- infra4Dfuture is designed to develop an overarching strategy and coordination mechanism for future demand-driven multimodal infrastructure innovation (towards the 9th Framework Programme).
- The initiative is a response to the Horizon 2020 call for proposals '[Coordinating national efforts in modernizing transport infrastructure and provide innovative mobility services](#)'. Deadline for submission of proposals is 4 April 2018.
- infra4Dfuture is looking for national transportation authorities (road, railways) to join the initiative and become consortium partners. Consortium partners join the infra4Dfuture consortium until March 2018 at the latest.
- Infra4Dfuture is also looking for relevant platforms to join the infra4Dfuture proposal by submitting a signed Letter of Support.
- Please contact the persons indicated at the end of this leaflet.

The need for coordinated national efforts to adequately meet future transport infrastructure challenges

The transportation system is once again on the brink of a major transformation of historical proportions. Already today, this transformation is being fuelled by a variety of different drivers, including the changing mobility needs of people and businesses, climate change, concerns about the negative impact of transportation on the environment, and the development of innovative technologies. Transportation will change dramatically in the next ten years placing new demands on the infrastructures of all transport modes. Adapting to these changes will require fast, well-founded action and decision-making on the part of transportation authorities and intensified collaboration across the different transport modes. This requires better coordinated, demand-driven, service-oriented research and innovation.

Transportation authorities responsible for the development, maintenance and modernization of transportation infrastructures that do not display an adequate amount of agility and continue to focus too long on a traditional, mono-modal understanding of the transportation system will be unprepared to meet the new demands on infrastructure. Those who do proactively meet the challenge with an openness for innovation will be in the favourable position of being able to shape the future of transportation. Ultimately, the proactive approach will be necessary for delivering safe, reliable, resilient, sustainable and integrated infrastructure.

The transportation system as a whole is by nature a networked structure composed of various elements that are characterised by great diversity, for example with regard to their modal focus. Furthermore, the transportation infrastructure in Europe is managed de-centrally by a diverse group of national authorities, each grappling with country-specific transportation-related challenges and subject to different organisation and governance structures.

National transportation authorities can profit from the development of a shared vision, guiding principles and a common toolbox for making the infrastructure fit for the future. While individual national authorities will in the end partly pave their own path due to specific national and regional needs, an alignment of efforts at the European level (and beyond) is necessary in order to ensure an efficient functioning of the system as a whole and to ensure a seamless flow of people and goods.

H2020 Coordination and Support Action (2018-2020)

In order to enable transport authorities to prepare for the above-mentioned challenges, the European Commission (EC) has launched the call for proposals for a Coordination and Support Action (CSA) (Horizon 2020 Work Programme 2018 MG-2-4-2018) '[Coordinating national efforts in modernizing transport infrastructure and provide innovative mobility services](#)' with following scope:

- 1. Develop a coordination mechanism that will allow National Transport Authorities to align their efforts in modernizing the transport infrastructure network;*
- 2. Identify new roles and competences for the infrastructure managers/operators to respond to the new and future functionalities of the transport infrastructure;*
- 3. Consolidate partnerships and alliances between the transport infrastructure stakeholders and the research community;*
- 4. Continue the coordination activities for information exchange and cross-cutting fertilization between projects funded under Horizon 2020, CEF and national schemes for the optimal exploitation of the results.*

The deadline for submission of the CSA proposal is **4 April 2018**.

The inclusion of the CSA in the H2020 WP is mainly the result of co-preparation by Member States and EC through the Transport Programme Committee. It also resulted in the allocation of a slot for a potential follow up of the currently running transnational ERA-NET Plus [Infravation](#) programme. The Infravation follow up may serve as a pilot for the implementation of the overarching coordination mechanism for future demand-driven infrastructure research that will be developed in the CSA. In response to the call for proposals for a CSA, a group of public authorities from various European countries have founded the initiative *infra4Dfuture*. The preparation and submission of the *infra4Dfuture* proposal are coordinated by Rijkswaterstaat with support of TÜV Rheinland Consulting.

Impact of the *infra4Dfuture* initiative

infra4Dfuture will facilitate the coordination of the efforts of national transportation authorities in Europe to modernize the transportation infrastructure network and provide innovative mobility services. Deeper coordination is necessary in the development, implementation and deployment of innovative solutions for infrastructure. A cross-border platform dedicated to deepening cooperation and coordination of efforts in these areas currently does not exist. *infra4Dfuture* will fill this gap and expedite cooperation and coordination at various levels by facilitating interactions between existing platforms.

The transport infrastructure world remains segregated to a large degree. In recent years, much progress has been made in the construction and maintenance of infrastructure within the different modalities. However, the focus is primarily mono-modal in nature, and there is still too little exchange between authorities and stakeholders of different modalities about applied, efficient, cost-effective, durable and sustainable solutions. The upcoming challenges, however, urgently require a

multimodal, cross-sectional cooperation and exchange of information and lessons learnt. In addition, coordinated, demand-driven transport infrastructure innovation is needed, as well as a more service-oriented approach on the part of transport infrastructure providers to the benefit of the infrastructure users.

Moreover, transport infrastructure innovation should more effectively address the main challenges for future infrastructure development and management: increasing resilience, successfully adapting infrastructure and related services to the changing character of mobility, and reducing the impact on the environment.

infra4Dfuture will take cross-border, transnational and trans-continental transport infrastructure innovation to a next, higher and more professional level to avoid duplication, spent costs and efforts.

infra4Dfuture will highlight topics such as:

- *allocation and detection of transport infrastructure innovation needs to the proper platforms;*
- *strategic stakeholder engagement and a stronger dialogue with industry;*
- *improving dissemination and implementation processes of transport infrastructure innovation and supporting research results*
- *alignment of transport infrastructure innovation and research agendas, programmes and ambitions.*

infra4D future will facilitate an optimised exchange of cross-modal information that will provide better, faster access to essential integral information enabling transport authorities earlier and better founded decision-making on policy and strategic planning and future investments.

infra4Dfuture implementation approach

infra4Dfuture will serve as a platform for the cooperation and coordination of efforts necessary at various levels:

- **Between transport authorities** (across borders): facilitate the exchange of information, ideas and best-practice. The exchange of information will provide better, faster access to essential integral information enabling earlier policy and strategic planning decision-making. Sharing knowledge and experience is of great value due to the existence of common challenges. In the current approach, the exchange of knowledge relies on specific persons in an organisation. The establishment of a systems approach to exchanging knowledge and experience is very important in order to avoid the loss of information due to personnel changes in particular organisations. Such an approach includes the exchange of information about the changing role and competencies of infrastructure managers.
- **Between transport authorities and other stakeholders** in the area of transportation infrastructures, stakeholders who are important for the overall planning process for infrastructure modernization (development, maintenance, refurbishment) – strategy development.

- **Between transport authorities and the research community.** More effectively coordinated research and development is needed to better facilitate demand-driven transport infrastructure innovation towards implementation and deployment. Moreover, a shift in focus is needed with greater consideration of needs of and benefits for the users of infrastructure.
- **Between relevant projects funded under H2020, CEF and national initiatives.** Exchange of information, results and lessons learnt should be increased especially concerning potential application of H2020 and national initiatives results as multipliers and for deployment on the CEF/TEN-T corridors.
- **Between stakeholders, industry and public authorities.** To ensure that public programmes (EC and national level) adequately address infrastructure innovation in their programmes and provide the right impulses for a successful modernization of transport infrastructure. To strengthen the link between industry and publicly funded programmes on transport infrastructure innovation.

Joining the infra4Dfuture consortium

The EC requires a proposal submission by national transport authorities from at least 10 EU member/associated countries. This should be reflected in the consortium partner composition of the infra4Dfuture proposal. **Already, national transport authorities of about 20 countries have indicated interest or confirmed to join the infra4Dfuture consortium** (overview in separate annex).

National authorities that want to join the infra4Dfuture consortium or have any need for further information or clarification are requested to contact the persons indicated at the end of the leaflet. In order to officially join the consortium, consortium partners will have to fill in a set of forms supplied at a later stage. **New partners join until 14 March 2018 at the latest!**

Relevant platforms for the initiative and the achievements of its goals can join the infra4Dfuture proposal by submitting a signed Letter of Support (LoS). Interested platforms are requested to contact the persons indicated at the end of the leaflet. Platforms may actively be approached with a request for a LoS by proposal coordinators Rijkswaterstaat or TÜV Rheinland Consulting.

Timeline

The deadline for submission of proposals for the CSA call is 4 April 2018. Consortium partners must join the infra4Dfuture consortium by 14 March 2018 at the latest.

Proposals submitted to the European Commission will be evaluated by a peer review of independent international experts. In the case of a favourable assessment of infra4Dfuture, the project is likely to start shortly after the summer holidays with a duration of two years.

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