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## Biodiversity and Infrastructure Synergies and Opportunities for European Transport Networks (BISON)

### Main objectives of the whole Project

- identify future research and innovation needs for a better integration of biodiversity with infrastructure planning, construction, operation and decommissioning.
- make linear infrastructure more high performing and reliable while taking into account the specific needs of Western and Eastern Europe.
- Support European Member States to fulfill their international commitments by engaging all stakeholders into biodiversity mainstreaming for infrastructure planning and development.
- Support European Member States to become political leaders through collaboration and support of European research institutions and infrastructure operators, and providing more sustainability at the international level through jointly addressing biodiversity and infrastructure challenges.



Preliminary draft of the European Defragmentation Map (Status October 2021)

### Detailed objectives of our task

Within the workpackage 5 „Towards Deployment“ we'll develop concrete innovative instruments and visual tools (i.e. map) for the planning and design stage of the infrastructure life-cycle with respective indicators for identifying conflict points. We design solutions on how to avoid and/or compensate for existing fragmentation caused by transport infrastructure and on how to avoid future fragmentation by new constructions and upgrading of infrastructure.

### Methods

The European Defragmentation Map will be presented and developed as a web-based application and includes e.g. Ecological Habitat Networks as valuable core components of a Green Infrastructure and the derivation of priorities for defragmentation and safeguarding Ecological Corridors. Its contents can be used in various planning processes in an appropriate manner and the consideration of (de-)fragmentation effects need to be optimized and aligned to the entire biological diversity and its functions.

Identified criteria and principles for recording, evaluation, prevention and compensation fragmentation will comprise all planning levels (SEA, EIA, IR), taking into account regional differences in Europe and considering as well special ecological functions of animal mobility and functions of transport related habitats as fauna corridors.

The map and relevant planning criteria and indicators that are primarily applicable to linear land infrastructure will be considered in relation to the different regional maturity levels. The key processes and relevant tools that are applicable to other transport modes will be considered for proposing possible adaptations for their implementation in other transport modes and/or regional clusters.

#### Project leader/ -manager

University of Kassel, Department of Landscape and Vegetation Ecology (Prof. Dr. Gert Rosenthal / Cindy Baierl)

#### Project coordination

Center for Research and Technology Hellas (CERTH)

#### Participants /Project Partners

MTES, FEHRL, CDV, UGE, SPW, UPGE, IOC, Cerema, WWF Romania, UNILIM, BfN, BAST, BMVI, Zarand, GDDKiA, MINUARTIA, VLO, CAU, UNI KASSEL, MoTC SR, NTIC, TII, EGIS, TRV, DTES.GENCAT

#### Task Partners

WWF Romania, University of Kiel (CAU), Federal Agency for Nature Conservation (BfN Leipzig)

#### Duration

January 2021 – July 2023 (30 months)

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