

# [TITLE] CONNECTING EUROPE, CONNECTING NATURE

#### [SUBTITLE]

Building bridges and crossing borders for the defragmentation of Europe



### [ACKNOWLEDGEMENT]

We, the participants of the IENE 2018 International Conference, acknowledge that:

- As of January 2014, the European Union adopted a new transport infrastructure policy that connects the continent: the Trans European Transport Network (TEN-T). The aim of the TEN-T is to strengthen the social, economic and territorial cohesion of the EU and to contribute to the establishment of a single European transport area.
   https://ec.europa.eu/transport/themes/infrastructure/about-ten-t\_en
- Almost concurrently, since 2013, the European Commission adopted an EU-wide strategy "The EU strategy on Green Infrastructure" to promote the deployment of green infrastructure across Europe and to develop a Trans-European Network for Green Infrastructure (TEN-G).
   https://ec.europa.eu/environment/nature/ecosystems/strategy/index\_en.htm
- The TEN-G aims to enhance nature's ability to deliver multiple valuable ecosystem goods and services, providing a wide range of environmental, social, climate change adaptation and mitigation, and biodiversity benefits. <a href="http://ec.europa.eu/environment/nature/ecosystems/index\_en.htm">http://ec.europa.eu/environment/nature/ecosystems/index\_en.htm</a>
- Habitat fragmentation is a top threat to biodiversity, its impact enhanced by growing infrastructure networks (transportation, energy and ICT). Land fragmentation results in undermining ecological connectivity and making it harder or impossible for wildlife to migrate and find new and/or better suitable habitats. By preserving the intra- and inter-population connectivity and thus diversity, biodiversity loss and extinction of species can be prevented. <a href="https://www.eea.europa.eu/soer-2015/europe/biodiversity">https://www.eea.europa.eu/soer-2015/europe/biodiversity</a>
- While also affected by other key threats loss and degradation of wildlife habitats and while likely to be aggravated by increasing effects of climate change - the rate of biodiversity loss accelerates not only throughout Europe but equally worldwide.
- As of 14 September 2012, the European Commission adopted a new strategy for international cooperation in research and innovation: "Enhancing and focusing EU international cooperation in research and innovation: a strategic approach."

https://ec.europa.eu/research/iscp/index.cfm?pg=strategy



# [STATEMENT]

In this framework, we, the participants of the IENE2018 conference hereby state:

- The need to acknowledge a sense of urgency concerning habitat
  fragmentation throughout Europe. The IENE Conference 2018 is therefore
  dedicated in part to presenting the results of the Dutch Defragmentation
  Program (MJPO) as a success story in reconnecting fragmented habitats.
  Furthermore Austria, Germany, France Czechia or Switzerland have equally
  developed national defragmentation concepts for their existing linear
  (road) network, adding to the importance of developing a synergetic approach
  towards transportation and nature conservancy.
- At the same time, new infrastructure developments, on all levels, from local
  to transnational, are expected to be implemented in yet unaffected
  landscapes in other regions as Eastern and Southern Europe, whether or not
  in the framework of the TEN-T.
- These developments extend **beyond Europe**, as by 2050 an additional 25 million kilometres of transport infrastructure will be constructed globally.
- The integration of a solid and comprehensive **ecological connectivity strategy within transportation and infrastructural developments** would acknowledge the negative impacts on ecosystems and wildlife habitats, which result from land fragmentation, and provide the means to address thereof.
- We the IENE community therefore call the European Commission to support the development of a European Defragmentation Program, as a synergy between the TEN-T and TEN-G strategies.
- Enhanced cooperation is necessary for such a Program, and it cannot be limited to national governments only, but should equally transcend sectorial collaboration. Experts and practitioners in the transportation and nature conservancy fields should work together and conduct joint research to identify innovative and cost-efficient solutions for defragmentation.
- The development and implementation of the European Defragmentation
  Program will support the defragmentation of wildlife habitats throughout
  Europe and equally use the resulting expertise to implement similar actions
  anywhere else in the world were habitat fragmentation is emerging as a key
  threat to biodiversity.



# [CALL/URGE]

Therefore, we, the participants of the IENE2018 conference call for:

- The allocation of **research resources** to develop a synergetic approach between the TEN-T and TEN-G as well as **to identify and perform a detailed** analysis of the bottlenecks between the two strategies. An important first step could be an annotated analysis with one or more maps.
- **Improved impact assessment** of new or upgraded transport infrastructure (TEN-T) by integrating a budget for defragmentation measures. This would imply, for example, integrating the costs for defragmentation measures of the Green Infrastructure Network within the European transport strategy.
- The development of an **action plan** that would include financial resources for the environmental improvement of the existing European transport network.
- The creation of a comprehensive, publicly available database and including specific information per country on the European defragmentation program with the aim of sharing data and knowledge among transportation and nature conservation experts and practitioners working in the field of transport infrastructure and ecology.
- The design and development of National and Cross-border Strategies for Defragmentation with the support of the IENE and collegial networks in other parts of the world (ICOET, ANET, ACLIE, etc.) to exchange expert knowledge on defragmentation.
- Strengthened interdisciplinary collaboration and cooperation with partner infrastructure related networks like CEDR, TRA, ITF, and/or DACH in the transport sector but also with relevant actors in the environmental sector.



# [DEFINITIONS]

#### 1 Trans-European Transport Network (TEN-T)

The Trans-European Transport Network (TEN-T) is a European Commission policy directed towards the implementation and development of a Europe-wide network of roads, railway lines, inland waterways, maritime shipping routes, ports, airports and rail-road terminals. It consists of two planning layers:

- •The Comprehensive Network: Covering all European regions
- •The Core Network: Most important connections within the Comprehensive Network linking the most important nodes.

The ultimate objective of TEN-T is to close gaps, remove bottlenecks and eliminate technical barriers that exist between the transport networks of EU Member States, strengthening the social, economic and territorial cohesion of the Union and contributing to the creation of a single European transport area. The policy seeks to achieve this aim through the construction of new physical infrastructures; the adoption of innovative digital technologies, alternative fuels and universal standards; and the modernisation and upgrade of existing infrastructures and platforms.

2 **Green Infrastructure (GI)**: 'A strategically planned network of natural and seminatural areas with other environmental features designed and managed to deliver a wide range of ecosystem services. It incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas. On land, GI is present in rural and urban settings' (European Commission, 2003). Benedict & McMahon (2006) also defined as 'an interconnected network of protected land and water that support native species, maintains natural ecological processes, sustains air and water resources and contribute to the health and quality of life for communities and people'.

#### 3 Fragmentation

The term fragmentation covers

1 the fragmentation/division/transection of dispersal or migration corridors and habitats

by linear barriers or edge effects due to traffic infrastructure and other linear technical elements or urban corridors

and

2. the Isolation/islandization of habitats

which is a thinning out and downsizing of habitats and the loss of connectivity by distance

due to the expansion or intensification of agriculture, forestry or settlement.

### References:

\_ Communication from the Commission to the European parliament, the Council, the European economic and social committee and the committee of the regions. Green infrastructure (GI) — Enhancing Europe's Natural Capital (COM/2013/0249 final; <a href="http://ec.europa.eu/environment/nature/ecosystems/index\_en.htm">http://ec.europa.eu/environment/nature/ecosystems/index\_en.htm</a>). \_ Benedict, M.A. and McMahon, E.T. 2006. Green Infrastructure: Smart Conservation for the 21st Century. Sprawl Watch Clearinghouse Monographs Series. 32 pp. Washington.



### [DECLARATIONS]

#### What are IENE Declarations?

Since 1996, IENE operates as an international and interdisciplinary forum to encourage and enable cross-boundary cooperation in research and mitigation and planning in the field of ecology and transport infrastructures. The IENE biannual international conference provides interdisciplinary discussion panels for these activities with the aim to present cutting-edge research, identify urgent questions and problems, discus effective solutions, and outline the paths for upcoming activities in transport and infrastructure ecology.

Since 2012, a Declaration is produced during each conference and focused on a topic that requires particular attention from transportation and nature conservancy stakeholders. This message represents a common statement by the participants and addresses decision makers, planners, technicians and researchers as well as the general public, by calling for actions that contribute to finding solutions to old and emerging conflicts, filling the research gap and overall minimising the impact that transport infrastructure exerts on nature.

See also previous IENE Declarations:

• IENE Declaration 2012: Overcome Barriers: Europe-wide and now http://iene2012.iene.info/?page\_id=320

• IENE Declaration 2014: Roadless Areas http://iene2014.iene.info/iene-2014-declaration/

IENE Declaration 2016: Habitats related to Transport Infrastructures <a href="http://www.iene.info/iene-2016-declaration/">http://www.iene.info/iene-2016-declaration/</a>