



IENE (Infra Eco Network Europe) • [www.iene.info](http://www.iene.info)  
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## IENE annual report 2016

IENE celebrated its 20 years' anniversary as a network. The achievements during the past 20 years makes an impressive list, where the publication of the COST 341 Handbook: Traffic and wildlife, the establishment of the IENE international conferences, the launches of the IENE Declarations and founding of the IENE Awards must be especially mentioned.

In 2016, the IENE International Conference was held in Lyon in France. With the number of participants close to 500, a new IENE record was set. During the year, IENE has been involved in a lot of arrangements as either responsible organiser, in partnership or through its members. By the end of 2016, the overall IENE arena has activated about 400 members, not only from Europe but all over the world, representing 51 countries. Through the IENE international conferences and their declarations, workshops, seminars, projects and the website the network has clearly developed to an irreplaceable cog in the development of a sustainable transport system.

By ending 2016, a new twenty years' period has started. What's achieved so far must continuously be developed and improved, new tasks and demands need to be responded. It's still a fact that the biodiversity is strongly threatened and that the transportation infrastructure is one of the main reasons, despite the great advances within Road Ecology the last 20 years.

Bearing in mind that, although the 64 million kilometres of paved roads on earth are enough for 83 return trips to the moon, an additional 25 million lane-kilometres will be constructed by 2050 according to existing plans (the majority in rising economies). A 40 % increase in only 35 years. It's no doubt that IENE will have a *very important and perhaps crucial* role to play the twenty years to come, in turning the depletion of biodiversity to the opposite, a necessary strengthening of the biodiversity.

Thank you for your hard work and successful contributions to fulfil the objectives of the IENE network! I hope you all are interested in strengthening the cooperation and willing to continue to contribute to the very important mission of IENE in the future.

/ Anders Sjölund, Chair of IENE Steering Committee

## ***IENE conferences, workshops and meetings***

### **Conferences**

The preparations and planning for the IENE 2016 international conference continued during the year and the conference took place in Lyon on August 30 to September 2. 465 participants from 41 countries attended, presenting 255 communications about all major topics concerning transport infrastructure and ecology.

The director of the conference was Yannick Autret at the French Ministry of the Environment, Energy and the Sea. Mr Autret is also a member of the IENE SC during the mandate period 2015-2016. The IENE Steering Committee was involved during the year with decisions and advisements about the arrangement.

Organisers of the conference were CEREMA (*Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement*) and FRB (the Foundation for Research on Biodiversity). Co-organisers of the conference were the French Ministry of the Environment, the Energy and the Sea, the French Ministry of Foreign Affairs and International Development, ADEME and Université Lyon 3.

More information about the conference can be found on the conference website (<http://iene2016.iene.info>) and on the post conference website with all presentations, authors etc. presented with texts, attachments, videos etc. (<http://postconf.iene.info>).

### **National workshops of 2016**

IENE supported the arrangement of a national IENE workshop in Hungary on May 4, 2016. The meeting took place at Budapest Zoo & Botanical Garden. It was the 6<sup>th</sup> event about transport infrastructure and its effects on wildlife that has been organized by the Hungarian Toad Action Group Association. The workshop was supported by the Hungarian Academy of Sciences (MTA Centre for Ecological Research) and Budapest Zoo and organised in cooperation with IENE.

The workshop included presentations related to linear infrastructure, environment impact assessments, mitigation measures and monitoring in Europe. In addition to the professional interest in organising this event, it was also aimed to honour the memory of Dr. Miklós Puky who established the Toad Action Group in 1986 and later became President of the Toad Action Group Association (1996-2015) and was the main organizer of the previous five meetings.

### **General Assembly (GA) 2016**

The GA took place in Lyon during the IENE 2016 international conference. Approximately 90 members participated in the meeting that contained election of Steering Committee and Election Committee, and short presentations of upcoming IENE events.

The SC had also proposed some minor changes in the statutes of IENE, about e.g. the usage of the IENE logo and the individual membership. The changes in the Memorandum of Understanding (MoU) were presented, discussed and accepted by the members during the GA.

## ***Promotion, cooperation and advisement projects***

### **Presentations of IENE during 2016**

These are some of the presentations about IENE that have been made during the year:

- On behalf of IENE a short history of the 20 years of activities was presented, as well as the implementation of the Dawei road project in Myanmar and Thailand.  
*National IENE workshop: Linear Infrastructure and Environment – Impact Assessments, Mitigation measures, Monitoring. Budapest, Hungary, May 4, 2016.*  
*Speakers: Lazaros Georgiadis and Elke Hahn.*

- Presentation in plenary session with the title “The evolution of Road Ecology reflected through 20 years development of the Infra Eco Network Europe IENE”.  
*IENE 2016 international conference. Lyon, France, August 30 to September 2, 2016.*  
*Speakers: Andreas Seiler.*
- Presentation of the IENE 2016 Declaration ‘Ecological design and maintenance for Transport Infrastructure Habitats’.  
*IENE 2016 international conference. Lyon, France, August 30 to September 2, 2016.*  
*Speakers: Eric Guinard and Carme Rosell.*
- Poster presentation with the title “The Dawei Road project: An international cooperation of IENE on sustainable planning of large linear infrastructure trans-boundary project in a Biodiversity Hotspot of Southeast Asia”.  
*IENE 2016 international conference. Lyon, France, August 30 to September 2, 2016.*  
*Authors: Lazaros Georgiadis, Miklós Puky (†), Elke Hahn, Anders Sjölund.*
- Workshop organised with the title “Towards global guidelines for infrastructure development - a project proposal” in cooperation with WWF and ANET.  
*IENE 2016 international conference. Lyon, France, August 30 to September 2, 2016.*  
*Authors: Rodney van der Ree, Andreas Seiler, Anders Sjölund, Lazaros Georgiadis, Elke Hahn, Kate Newman.*
- A presentation about bear-wildlife passages on Egnatia Highway, road ecology and IENE.  
*Seminar on Design and Implementation of Large Technical Infrastructures at the Technical school of Athens. Athens, Greece, October 25, 2016.*  
*Speaker: Lazaros Georgiadis.*
- A presentation about IENE: ‘IENE network - Harmonising transportation with nature’.  
*Conference: LIFESTRADE international congress – Wildlife Road Kill Prevention: Theory, Research and Practice. Perugia, Italy, October 4-5, 2016.*  
*Speaker: Carme Rosell.*
- E-poster with the title “Global Best-Practice in Ecologically-Sensitive Linear Infrastructure – New Global Guidelines” in cooperation with WWF and ANET.  
*IUCN World Conservation Congress “Planet at the crossroads”, Honolulu, Hawaii, U.S.A., September 1-10, 2016.*  
*Authors: Elke Hahn, Lazaros Georgiadis, Rodney van der Ree, Andreas Seiler, Anders Sjölund, Kate Newman.*  
*IUCN IENE representative: Lazaros Georgiadis.*

## **New publishing platform with Frontiers in Ecology and Evolution**

In September 2016 IENE announced that the community-rooted open-access publisher Frontiers in Ecology and Evolution will host a new platform for publication on the topic of Ecology and Transportation. A new topic for publication was initiated by and formed in collaboration with the four recurring international conferences IENE, ICOET, CIBIV and ANET. The aim of the project is to promote collaboration and communication, internationally and between research and practice.

The first research topic was launched in September (in the section *Urban Ecology*) and it is planned to be the first in a series of topics, featuring the upcoming conferences and their specific themes. The deadline for submission of papers was set to December 31, 2016, but it was extended into 2017. The call for papers welcomed not only research papers as contributions but also other article types such as Original Research, Methods, Hypothesis & Theory and Data reports.

Read more about the [background and goals of this project](#) or visit the topic on [Frontiers](#) for more information about Authors Guidelines etc.

## **IGELI – International Guidelines for Ecologically-adapted Linear Infrastructure**

Within the framework of the development of international cooperation of IENE, a global approach to environmentally friendly linear infrastructure started during the IENE 2014 International Conference

in Malmö, Sweden. With the cooperation with WWF and the support of Federal Ministry for Transport, Innovation and Technology of Austria and the Swedish Transport Administration, a special project was implemented in 2015 for the development of a [trans-border transportation project in Myanmar and Thailand](#). The presentation of the project at the [ICOET 2015 Conference in Raleigh, USA](#) gave the starting point for the idea to develop international guidelines and best practices for environmentally friendly linear infrastructures. The basic partner's team also included ANET (the Australasian Network for Ecology and Transportation).

For the implementation of the proposed project IGELI, in a first phase, an international dialogue will be completed in several meetings in a global level. In 2016, additional workshops and presentations was held to further refine and develop the ideas and attract new participants and supporters, including:

- A special workshop in the [IENE 2016 International Conference](#) in Lyon, France, co-organised by the Cerema which joined the basic partners' team (a pre-conference workshop on August 29 and an official workshop on August 31, 2016).
- Participation in the [IUCN congress in Hawaii \(September 1-10, 2016\) with a presentation of an e-poster](#).

Additionally, two international events are planned for 2017, and at a second phase of the project, a more concrete framework of the needs will be shaped for the development of the guidelines project.

The IGELI project is relevant to anyone involved in planning, designing, constructing, funding, approving, and managing linear infrastructure from government, private industry, international development banks and other investors, conservation groups, and research institutions. It seeks international feedback on what would make the guidelines realistic and practical in a local context, thereby ensuring that the guidelines will ultimately meet their needs. The project also seeks opportunities for collaborations from partner organisations and sponsors.

## **CEDR**

IENE has, through its members, been involved in the CEDR call Roads & Wildlife. The end-of-program workshop was held in Cologne, Germany on November 7-8, 2016.

## **European defragmentation map**

IENE supports the German project with a European map of defragmentation.

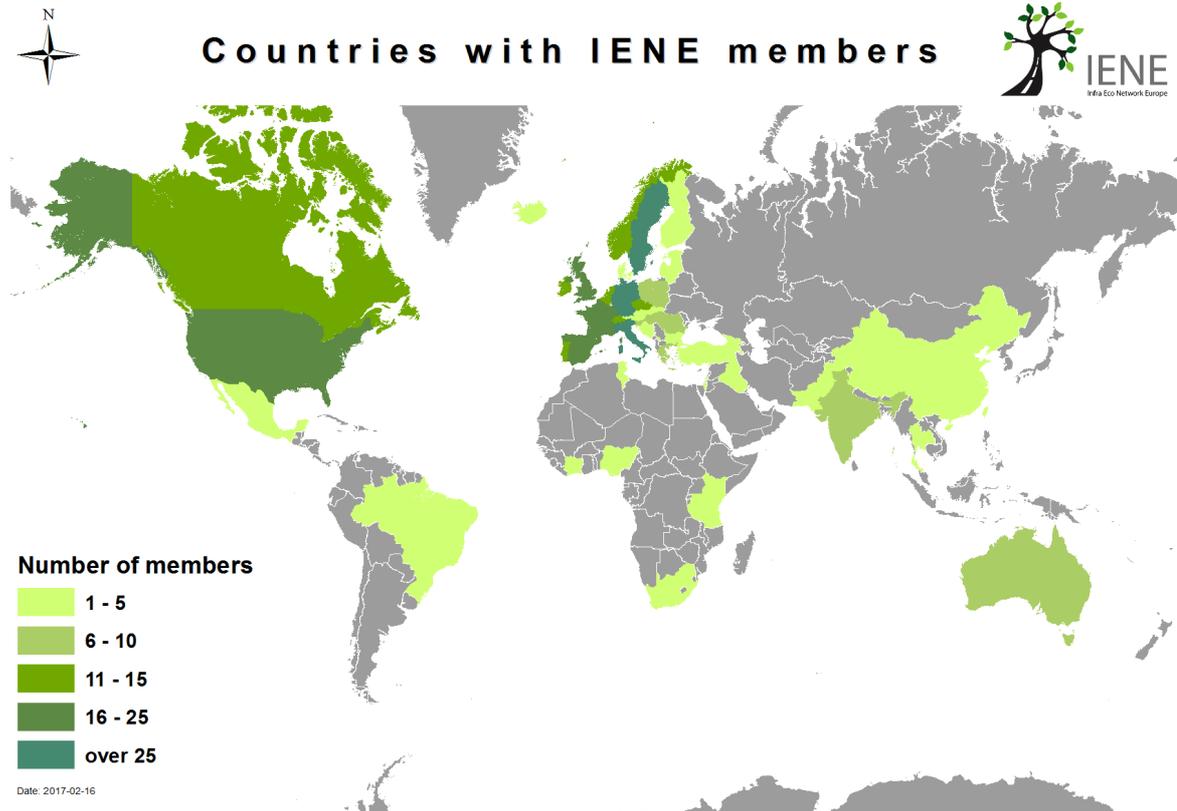
## **Economy**

The Swedish Transport Administration have secured the funding of the IENE Secretariat for the four-year period 2015-2018. Decisions about the budget are made by the Steering Committee and the resources are covering e.g. the Secretariat work with administration of members and websites, coordination of Steering Committee meetings, website costs and management etc. For the year 2016, the Secretariat had incomes of around 90.000 EUR and by the end of the year costs for around 52.000 EUR. The remaining founding is transferred to cover costs during 2017 and 2018.

## **Members**

The total number of IENE members was 383 at the end of December 2016.

The network got 48 new members during 2016. These members were from Australia, Austria, Brazil, China, Czech Republic, Estonia, France, Georgia, Germany, Hungary, Iceland, Ireland, Italy, Netherlands, Norway, Romania, Slovakia, South Africa, Spain, Sweden, Switzerland, Tanzania, United Kingdom and United States of America.



## Public and member services and activities

### Website and social media

The website of IENE is improved continuously and updated with news and information.

The number of followers of IENE pages on social media has increased during the year. The LinkedIn page had 80 followers at the end of December 2016 (42 the year before). The Facebook page had 160 followers at the end of December 2016 (110 the year before).

The IENE discussion group on LinkedIn is not so well used. On Facebook, a group for the IENE 2016 conference was formed and many of the conference participants joined the group and there were some exchange of information and images etc. both before, during and after the conference.

### IENE Awards 2016

The Personal Award 2016 was given to Lars Nilsson from Sweden:

*“For his personal commitment and extraordinary achievements concerning the mitigation of negative effects of transport infrastructure on nature and biodiversity. Apart from his important work concerning road ecology in Sweden he played a major and crucial role in the restart of IENE in 2009, as well as in the following years.”*

The Project Award 2016 was given to the Handbook of Road Ecology which was published in the summer of 2015:

*“With a global coverage and beautifully done, the Handbook of Road Ecology connects current scientific knowledge and practical requirements to address the pressing issues of transportation infrastructure development. The book has 114 authors from over 25 countries. Rodney van der Ree and his co-editors Daniel Smith and Clara Grilo brought together the world’s leading researchers, academics, practitioners and transportation agency personnel to present the current status of the*

*ecological sustainability of the linear infrastructure. The success of the book has been impressive and it is a very inspiring book that is attracting more people to the field of road ecology. It simply is by far the best book ever written in this field.”*

**IENE Declaration 2016**

The IENE Declaration had the title “Ecological design and maintenance for habitats related to transport infrastructures”. The declaration was improved and approved by the participants of the IENE 2016 international conference during the General Assembly on September 1, 2016.

**Members survey about services and activities of IENE**

In December 2016, the SC and Secretariat sent an invitation to all IENE members to participate in a web survey about IENE as a network, how well our present functions, services and activities meet the needs and wishes from the members, and how the network could be developed in the future. The survey contained 14 questions, divided into three parts: A) Background and motives, B) Functions, services and activities today, C) Improvements and future developments.

127 members replied out of 361 invited addresses (35 %). The result of the survey will be used as a base for upcoming discussions within the SC and the network, about the development of IENE. An example of the result is shown in figure 1, with the distribution of answers to the question “Why are you a member of IENE?”.

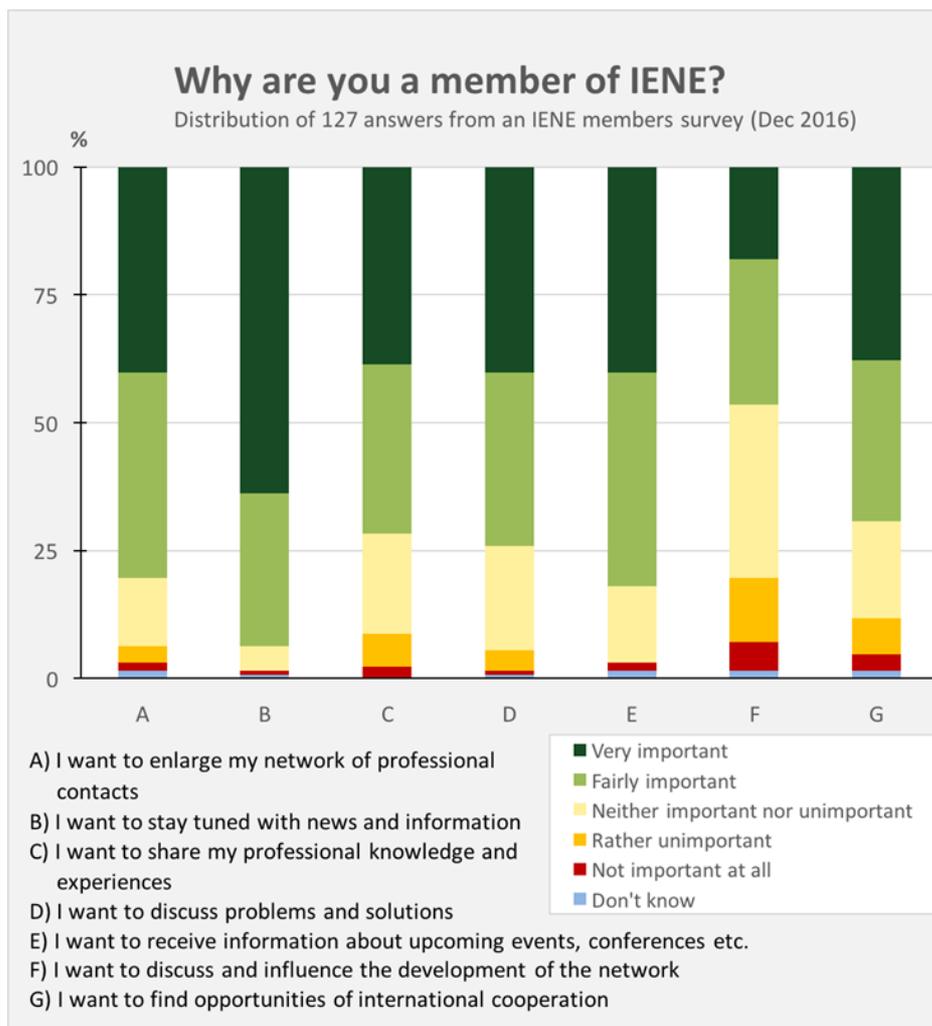


Figure 1. Distribution of answers to a question in the IENE members survey in December 2016.

## Steering Committee (SC)

### SC meetings

The SC had 10 meetings during 2016. Short summaries of the Steering committee meetings are published on the website after each meeting.

### SC members

During 2016, the IENE Steering Committee had the following members:

**Adam Hofland** (Netherlands). Elected as SC member during GA 2016 in Lyon in September 2016. Head of the Organisation Committee for the IENE 2018 International Conference. National Coordinator of the National Defragmentation Program at the Dutch Ministry of Infrastructure and the Environment. Field of expertise: wildlife crossings, mitigation measures, animal vehicle collisions, maintenance, landscape planning, landscape architecture, communication.

**Anders Sjölund** (Sweden) – chair of IENE SC. Senior Adviser. National Coordinator of Nature at Swedish Transport Administration. Field of expertise: wildlife and transport, animal vehicle collisions, wildlife crossings, infrastructure habitats and maintenance, planning.

**Andreas Seiler** (Sweden) – staff at IENE secretariat. PhD, senior researcher, ecologist at SLU (Swedish University of Agricultural Sciences). Field of expertise: wildlife and traffic, animal-vehicle collisions, mitigation, monitoring, landscape ecology, fragmentation, permeability, GIS.

**Carme Rosell** (Spain/Catalonia). PhD and senior consultant at Minuartia wildlife consultancy. Field of expertise: wildlife and transport, animal vehicle collisions, wildlife crossings.

**Elke Hahn** (Austria). Work at the Federal Ministry for Transport, Innovation and Technology, Department of Roads – Planning and Environment. Field of expertise: Environmental Impact Assessment, mitigation, wildlife and roads.

**Lazaros Georgiadis** (Greece). Biologist-Environmental consultant. Field of expertise: large carnivores, mitigation measures, environmental policy, nature conservation, education.

**Marita Böttcher** (Germany). Scientific counsellor at the Federal Agency for Nature Conservation, Department: Mitigation Impact Regulation, transport and planning. Field of expertise: fragmentation (also indicators), planning (SEA; EIA; MIR), other impacts: artificial lightening, noise, small species.

**Paul J. Wagner** (USA) – representing ICOET. Washington State Department of Transportation.

**Tony Sangwine** (United Kingdom). Senior Principal Environmental Adviser at Highways England. Field of expertise: horticulture, environmental assessment and design for transport.

**Yannick Autret** (France) – conference director of IENE 2016. French Ministry of Ecology, Sustainable Development and Energy (MEDDE), Directorate of Research and Innovation, Secretary of ITTECOP Research Programme (Infrastructures, Ecosystems and Landscape). Field of expertise: environmental impacts of transport (vehicles and infrastructure) - noise, pollution, landscape and biodiversity