

1st Asia-Europe Transportation Ecology Forum

(Organized on Zoom)

Time 1: November 24, 2022

08:00-13.30 (Central European Time, UTC +1)

15:00–20:30 (Beijing Time, UTC +8)

Time 2: November 25, 2022

08:00-13.30 (Central European Time, UTC +1)

15:00–20:05 (Beijing Time, UTC +8)

Zoom Meeting ID: 847 8134 3831

Password: 2022

Webinar Link for Registration:

https://us02web.zoom.us/webinar/register/WN_16jRb3jnTFa8WxMF2DdjgA

(Or copy the link to the browser to open)

Organizers:

China Academy of Transportation Sciences (CATS)

Infrastructure and Ecology Network Europe (IENE)

Co-Organizers:

China Sustainable Transport Innovation Center

Environmental and Sustainability Division, China Highway & Transportation Society

China Highway & Transportation Society

Zoological Society of London (ZSL)

Wildlife Conservation Society (WCS)

Australasian Network of Ecology and Transportation (ANET)

World Wide Fund for Nature (WWF), China

IUCN WCPA Connectivity Conservation Specialist Group's Transport Working Group (TWG)

Center for Large Landscape Conservation (CLLC)

Duke Nicholas Institute

Road Ecology Research Society of Japan

Research Institute of Highway Ministry of Transport of China

World Transport Convention (WTC)

China Communications and Transportation Association (CCTA)

Hellenic Institute of Transport

Permanent International Association of Road Congresses (PIARC)

Peking University

Coordinators:



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1st Asia - Europe Transportation Ecology Forum



Organizers



Co-organizers



可持续交通创新中心

China Sustainable Transport Innovation Center



北京大学自然保护与社会发展研究中心
Center for Nature and Society

Background

In October 2021, Kunming Declaration was adopted at the first part of the 15th Conference of the Parties (COP15) to the United Nations Convention on Biological Diversity (CBD). The declaration clearly states that a key objective of the post-2020 global biodiversity framework is to reverse the current trend of biodiversity loss and ensure that biodiversity is on a path to recovery by 2030 at the latest, leading to the full realization of the 2050 vision of "People and Nature in Harmony". In the same month, the second United Nations Global Conference on Sustainable Transport was held and called for "accelerating the development of green and low-carbon transport modes and strengthening green infrastructure". Transportation and biodiversity conservation, as two different disciplines, are constantly coming across each other to achieve a common goal for more sustainable development of the world.

Asia has the largest population and transport infrastructure in the world. At the same time, it is extremely rich in biodiversity. The economic development of developing countries and regions in Asia urgently requires the construction and upgrading of transport infrastructure, while facing the major challenges and responsibilities of biodiversity conservation.

In December 2021, the Chinese Academy of Transportation Science of the Ministry of Transport of China (CATS), together with several national and international organizations, organized the first Asian Transportation Ecology Forum, with nearly 200 participants from 13 countries. Participants expressed the need for more such transnational, cross-regional, and interdisciplinary exchanges of knowledge, research, and collaboration. Such an effort will promote the mainstreaming of biodiversity conservation in the practice of construction and operation of transport infrastructure and will encourage the transport industries and conservation communities to work together to support the process of global sustainable development.

The Infrastructure and Ecology Network Europe (IENE) is the world's largest and most experienced network of transport ecology experts with more than 400 registered members in over 50 countries worldwide. It is dedicated to bringing the world's leading experts and to sharing knowledge and experience among countries and regions.

Based on the feedback from participants of the first Asian Transportation Ecology Forum, with the purpose to continue promoting exchanges and cooperation between the transport industry and the conservation community, CATS and IENE have decided to organize the first Asia-Europe Transportation Ecology Forum virtually from 24-25 November 2022. This plan has received strong support from over 17 organizations as co-sponsors.

The aim of the Asia-Europe Transportation Ecology Forum is to bring together stakeholders from various sectors, share knowledge and experiences through research and practice, and to promote cross-sector collaboration in the field of transport ecology for a sustainable future.

Agenda of the forum

Thursday 24 th November, 2022		
CET	China time	Presentations
08:00-08:10	15:00-15:10	Opening Remarks and Presentation of CATS (Prof. Jiding Chen, Vice President, CATS, China)
08:10-08:20	15:10-15:20	Opening Remarks and Presentation of IENE (Anders Sjolund, Chair of Governance Board, IENE)
08:20-08:50	15:20-15:50	Key note speech Plans, trains and automobiles: a global picture of environmental risks and socio-economic benefits of planned road and rail infrastructure (Andy Arnell, UNEP-WCMC)
08:50-09:05	15:50-16:05	Break
<p><i>All presentations listed below already include time of translations.</i></p> <p><i>Dear presenters, please keep on time, thank you!</i></p>		
<p>Session I: International experiences and implications for developing road ecology in Asia (Moderator: Yaping Kong, Director, CATS, China)</p>		
09:05-09:10	16:05-16:10	Introduction of this session (Yaping Kong, Director, CATS, China)
09:10-09:25	16:10-16:25	PI-1: A Global Strategy for Ecologically Sustainable Transport and other Linear Infrastructure (Lazaros Georgiadis, IENE and CERTH, Greece)
09:25-09:40	16:25-16:40	PI-2: Utilizing states' international obligations to address linear infrastructure impacts on migratory species (Clara Nobbe and Marc Attallah, CMS, Germany)
09:40-09:55	16:40-16:55	PI-3: Rebuilding Bridges: Engaging stakeholders and innovating approaches to improve habitat connectivity, social economics and engagement in UK (Katherine Aburrow, Animex International, UK)
09:55-10:10	16:55-17:10	PI-4: Austria's Defragmentation Programme: Successes and Challenges (Elke Hahn, Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology and IENE, Austria)
10:10-10:25	17:10-17.25	PI-5: Linear infrastructures and Biodiversity in South Africa (Wendy Jane Collinson, The Endangered Wildlife Trust, South Africa)
10:25-10:40	17:25-17:40	Break

Thursday 24th November, 2022		
Session II: Transportation ecology in Asia: Case studies (Part A) (Moderator: Dr. Aili Kang, Strategic Engagement Director, Wildlife Conservation Society, China)		
10:40-10:45	17:40-17:45	Introduction of this session (Dr. Aili Kang, Wildlife Conservation Society, China)
10:45-11:00	17:45-18:00	PII-1: Global transport infrastructure development initiatives (Alice Hughes, School of Biological Sciences, University of Hong Kong, China)
11:00-11:15	18:00-18:15	PII-2: A Holistic Model for Inclusive and Resilient Linear Infrastructure in South-East Asia (Matthew Baird, Asian Research Institute for Environmental Law - ARIEL, Thailand)
11:15-11:30	18:15-18:30	PII-3: A global knowledge sharing platform in transport ecology: www.transportecology.info (Darryl Jones, Centre for Planetary Health & Food Security and School of Environment & Science, Griffith University, Brisbane, Australia)
11:30 -11:45	18:30-18:45	PII-4: A low-cost Wild Animal Protection System through Animal Presence and Movement Detection using wireless sensor network (Subrat Kar, Electrical Engineering Department, Indian Institute of Technology Delhi, India)
11:45-11:50	18:45-18:50	Short break
SESSION III (PIARC's workshop): Sustainability challenges for (road) mobility and wildlife in Eurasia, barriers and opportunities (Moderator: Lazaros Georgiadis)		
11:50-12:00	18:50-19:00	Short introduction of PIARC and the TC 3.4 (Eric Dimnet, Mobility officer at the General Commission for Sustainable Development, France, PIARC TC 3.4 Chair)
12:00-13.20	19:00-20:20	Open discussion and interactive work session in the form of round table with invited guests aiming to identify the challenges towards achieving environmental sustainability on road networks development in Asia in connection with Europe defining the role of transport authorities
13:20-13:25	20:20-20:25	Conclusions of the Session (Lazaros Georgiadis)
13:25-13:30	20:25-20:30	Closing remarks of the day

Thursday 24 th November, 2022		
		(Aili Kang, Strategic Engagement Director, Wildlife Conservation Society, China)

Friday 25 th November, 2022		
CET	China time	Presentations
08:00-08:30	15:00-15:30	<p>Opening of the day and key note speech</p> <p>Ecological protection and Restoration along roads in Ecological Sensitive Area, China</p> <p>(Yaping Kong, Director, CATS, China)</p>
<p>Session IV: Wildlife Roadkill in Asia</p> <p>(Moderator: Dr. Qilin Li, Hianan Tropical Ocean University, China)</p>		
08:30-08:35	15:30-15:35	<p>Introduction of this session</p> <p>(Dr. Qilin Li, China)</p>
08:35-08:50	15:35-15:50	<p>PIV-1: Factors influencing wildlife roadkill at Mt. Fuji, Japan, a UNESCO World Heritage Site</p> <p>(Yoichi Sonoda, International Industrial Technology College & Meiji University, Japan)</p>
08:50-09:05	15:50-16:05	<p>PIV-2: A large-scale analysis reveals unimodal and U-shaped effects of traffic volume on roadkill</p> <p>(Dror Denneboom, Technion – Israel Institute of Technology, Israel)</p>
09:05-09:20	16:05-16:20	<p>PIV-3: Wildlife-vehicle collisions in Asia: what we know so far about the impact on populations?</p> <p>(Clara Grilo, CESAM - Centre for Environmental and Marine Studies, Faculdade de Ciências da Universidade de Lisboa Portugal)</p>
09:20-09:35	16:20-16:35	<p>PIV-4: Concerns for Herpetofauna: Road associated mortalities in National Highway 715 in Assam, India (Somoyita Sur, Department of Zoology, Animal Ecology and Wildlife Biology laboratory, Gauhati University, India)</p>
09:35-09:50	16:35-16:50	<p>PIV-5: Roadkill on Banling Highway in South China</p> <p>(Dr. Qilin Li, Hianan Tropical Ocean University, China)</p>

Friday 25 th November, 2022		
09:50-10:05	16:50-17:05	Break
Session V: Planning, habitat, and others (Moderator: Dr. Xinjun Wang, Vice Director, CATS, China)		
10:05-10:10	17:05-17:10	Introduction of this session (Dr. Xinjun Wang, Vice Director, CATS, China)
10:10-10:25	17:10-17:25	PV-1: Impacts of planned linear infrastructure on the habitat of Asian elephants in Nepal's Terai Arc region (Dinesh Neupane, Southeast Asia Biodiversity Research Institute, Chinese Academy of Sciences & Center for Integrative Conservation, Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences)
10:25-10:40	17:25-17:40	PV-2: Alignment Optimization: A preliminary assessment of construction, economic, and environmental costs (in Myanmar) (Grant Connette, The Smithsonian Institution, USA)
10:40-10:55	17:40-17:55	PV-3: Development regulations, perverse incentives, and strategic road planning (Jayden Engert, Centre for Tropical Environmental and Sustainability Science, James Cook University Australia)
10:55-11:10	17:55-18:10	PV-4: A Monitoring and evaluation method on road impact and animal avoidance effects based on intelligence technology (Minghao Gong, Institute of Ecological Conservation and Restoration, Chinese Academy of Forestry, China)
11:10-11:25	18:10-18:25	PV-5: Current status and future of road ecology research for multidimensional health (Hui Li, Tongji University, China)
11:25-11:40	18:25-18:40	Break
Session VI: Transportation ecology in Asia: Case studies (Part B) (Moderator: Dr. Yun Wang, CATS, China)		
11:40-11:45	18:40-18:45	Introduction of this session (Dr. Yun Wang, CATS, China)
11:45-12:00	18:45-19:00	PVI-1: Impact of road on wildlife and mitigation measures in

Friday 25 th November, 2022		
		Sanjiangyuan National Park in China (Fei Zhou, Chief Program Officer of WWF China, China)
12:00-12:15	19:00-19:15	PVI-2: Effects of roads on leopards (<i>Panthera pardus</i>) movement: males vs. females (Claudia Silva, Faculdade de Ciências da Universidade de Lisboa, Portugal)
12:15-12:30	19:15-19:30	PVI-3: Effect of roads on activities of North China leopard in the middle section of Taihang Mountains (Beibei Liu, China Felid Conservation Alliance, China)
12:30-12:45	19:30-19:45	PVI-4: The Effect of Roads and Railways on Terrestrial Species in Asia: A 20-year Review. (Dr. Aditya Gangadharan, Program Lead-Lands, The Nature Conservancy-India)
12:45-13:00	19:45-20:00	PVI-5: Research-informed mitigation planning for Mahendra's Road expansion in the Terai Arc Landscape (Tony Clevenger, Western Transportation Institute, Montana State University, USA)
13:00-13:05	20:00-20:05	Closing remarks of the day and the 1st Asia-Europe Transport Ecology Forum (Lazaros Georgiadis and Yun Wang)

The following posters of the Forum will be available with a web-link¹:

- P1. Road Ecology for Multidimensional Health: Current Status and Future Development (Hui Li, Tongji University, China)
- P2. Annual patterns of small vertebrates roadkilled in a city of China (Qiong Wu, Taozhu Sun and Zhongqiu Li, Nanjing University, China)
- P3. Research status and challenges of road impact on wildlife in China (Abudusaimaiti Maierdiyali^{1,2}, Yun Wang^{2*}, Shuangcheng Tao², Yaping Kong², Hao Wang¹, Zhi Lu, 1Peking University, 2Chinese Academy of Transportation Sciences, China)

¹ <https://www.iene.info/news/posters-of-the-1st-asia-europe-transportation-ecology-forum/>

- P4. An analytical framework of factors affecting wildlife-vehicle collisions and barrier to movement (Haotong Su and Yun Wang, China Academy of Transportation Sciences, China)
- P5. The Impact and the Countermeasures against the Ecosystem Barrier of Temporary Projects of Railway (Wang Bijun¹, Wu Zhen, Liu Lei², Cai zhizhou³, 1 China Railway 11th Bureau Co., Ltd, 2 Center for Environmental Protection of Ministry of Transport, 3 Center for Environmental Protection of Ministry of Transport, China)
- P6. Transportation technology empowers transportation governance reform: A three-dimensional perspective of technology, value and goal (Guang Hui Zhao, Song Zhang, Guizhou University of Finance and Economics)
- P7. Spatial and Temporal Characteristics of Landscape Pattern in the Three-River Headwaters Road Network from 2010 to 2020 (Zhaoming Wang, Shegang Shao, Xiaofei Liu, Yanan Qi and Sen Zhao, Research Institute of Highway, Ministry of transport, China)
- P8. Land use, vegetation cover and landscape pattern change of main linear infrastructure on the Qinghai-Tibet Plateau, China (Siqi Yang, Gaoru Zhu, Transport planning and research institute, Ministry of transport, China)