

The International Conference on:



UNIVERSITÀ
DEGLI STUDI
DI PALERMO

SCUOLA
POLITECNICA



Urban Transit and Sustainable Networks (UTSN)

25 - 27 October, 2017 Palermo, Sicily, Italy



DICAM
DIPARTIMENTO DI INGEGNERIA CIVILE, AMBIENTALE,
AEROSPAZIALE, DEI MATERIALI



Springer

Official Program



The International Conference on: 25 - 27 October, 2017 Palermo, Sicily, Italy



UNIVERSITÀ
DEGLI STUDI
DI PALERMO

SCUOLA
POLITECNICA



IEREK
RESEARCH & KNOWLEDGE ENRICHMENT

Urban Transit and Sustainable Networks (UTSN)

Chairperson:

Ferdinando Trapani

Scientific coordinator:

Marco Migliore

Executive Committee

Giuseppe Abbate | Giulia Bonafede | Luciano De Bonis | Giuseppe Di Benedetto | Renzo Antonio Lecardane | Barbara Lino | Marco Migliore | Maurizio Petrangeli | Daniele Ronsivale | Ferdinando Trapani | Valeria Scavone | Zeila Tesoriere

IEREK Organization

Mourad Amer, IEREK CEO | Abdelaziz Mahmoud Sakr, IEREK General Director | Fabio Naselli – Scientific Director IEREK Europe | Francesca Giangrande



Società
italiana
degli urbanisti **SIU**

INU
Istituto Nazionale
di Urbanistica



Urban Transit and Sustainable Networks (UTSN)

Scientific Committee

| **Giuseppe Abbate**, Dept. of Architecture, University of Palermo, Italy | **Mohamed Hosny Abdelrahim**, Faculty of Engineering, Civil Engineering, Transportation Department, Alexandria University, Egypt | **Aleya Mahmoud Abdel-Hadi**, prof. em., Faculty of Fine Arts, Helwan University, Egypt | **Chaham Alalouch**, College of Engineering, Sultan Qaboos University, Muscat, Oman | **Tüzün Baycan**, Dept. of Urban and Regional Planning, Istanbul Technical University | **Vasco Barbosa**, Federal University of Viçosa, Brazil | **Maurizio Berti**, Director/Dean of faculty of Architecture and Planning, Universidade Lúrio - Unilúrio, Nampula, Mozambique | **Giulia Bonafede**, Dept. of Architettura, Università degli Studi di Palermo, Italy | **Gail Borden**, USC School of Architecture, USA | **Francesco Calabrò**, Dept. of Heritage, Architecture, Urban planning, Mediterranean University of Reggio Calabria, Italy | **Inaqui Carnicero**, Arch. Office: Madrid-NewYork | **Oscar Carracedo**, National University of Singapore | **Maurizio Carta**, Dept. of Architecture, University of Palermo, Italy | **Luciano De Bonis**, Dept. of Biosciences and Territory, University of Molise, Italy | **Lucia Della Spina**, Dept. of Heritage, Architecture, Urban planning Mediterranean University of Reggio Calabria, Italy | **Sheeba Chander**, School of Architecture at Hindustan University PhD (Planning), Hindustan University, Chennai, India | **Giuseppe Di Benedetto**, Dept. of Architecture, University of Palermo, Italy | **Wael Mohamed Yousef Elsayed**, Faculty of Engineering at Cairo, Al-Azhar University, Egypt. | **Abraham George**, Dept. of Architecture and Regional Planning, Indian Institute of Technology Kharagpur, India | **Sandro Fabbro**, Dept. of Civil Engineering and Architecture (DICA), University of Udine, Italy | **Tomohiro Fukuda**, Department of Sustainable Energy and Environmental Engineering, Graduate School of Engineering, Osaka University, Japan | **Adriana Galderisi**, Dept. of Architecture and Industrial Design, Università degli Studi della Campania – Luigi Vanvitelli, Italy | **Iman Osama Mohamed Abd El Gawad**, Dept. of Architecture, Faculty of Fine Arts, Helwan University, Cairo, Egypt | **Maria Luisa Germanà**, Dept. of Architettura, Università degli Studi di Palermo, Italy | **Tullio Giuffrè**, Libera Università' della Sicilia centrale "Kore", Italy | **Massimo Guarascio**, Dept. Ingegneria Chimica Materiali Ambiente - Università degli Studi Roma Sapienza, Italy | **Lokesh Gupta**, Sir Padampat Singhania University, Udaipur, India | **Antonella Falzetti**, Dipartimento di Ingegneria Civile e Ingegneria Informatica, Università di Roma Tor Vergata, Italy | **Mohammad Husni El-Hajj**, Faculty of Arts, Lebanese University, Lebanon | **Abdurrahman Mohamed**, Dept. of Architecture and Interior Design College of Engineering, University of Bahrain | **Matteo Ignaccolo**, Dipartimento Ingegneria Civile e Ambientale, University of Catania, Italy | **Nikos Komninos**, Director of the Urban and Regional Innovation Research (URENIO), Aristotle University of Thessaloniki, Greece | **Paolo La Greca**, Dept. of Architecture and Town Planning, University of Catania, Italy | **Renzo Lecardane**, Dept of Architettura, Università degli Studi di Palermo, Italy | **Mohammed A. Mandour**, Faculty of Architecture at Helwan University, Egypt | **Marco Migliore**, Dept. of Civil, Environmental, Aerospace, Materials Engineering, Università degli Studi di Palermo, Italy | **Francesca Moraci**, Dept. of Architettura e Territorio, Università Mediterranea di Reggio Calabria, Italy | **Fabio Naselli** – Scientific Director IEREK Europe | **Maurizio Petrangeli**, Dept. of Architecture, Università Roma Sapienza, Italy | **Cristina Piselli**, University of Perugia, Italy | **Fabiola Safonte**, Istituto di Ricerche e Promozione Aree Interne in Sicilia, Italy | **Valeria Scavone**, Dept of Architettura, Università degli Studi di Palermo, Italy | **Michele Sbacchi**, Dept. of Architecture, University of Palermo, Italy | **Mohamed Maher Shahin**, Faculty of Civil Engineering, Alexandria University, Egypt | **Enzo Siviero**, E-Campus University, Italy | **Eric J. Strauss**, School of Planning, Design and Construction, Michigan State University, USA | **Zeila Tesoriere**, Dept. of Architecture, University of Palermo, Italy | **Ferdinando Trapani**, Dept. of Architecture, University of Palermo, Italy |

Urban Transit and Sustainable Networks (UTSN)

UTSN Introduction

One of the main components of the city is its transportation and networking systems. Such components could solely impact the city and its surroundings in a positive or a negative manner.

Transportation in urban areas, with its related environmental and social impacts, is a topic of significant concern for policymakers in both municipal and central government as well as for the urban citizens who need effective and efficient transport systems. Therefore, transportation and urban Planning is crucial for developing countries in that sense that it should be tackled and challenged by researchers and practitioners.

Whereas this conference will aim to help and provide solutions that will aid in the cities' transformation, define & reduce negative impacts on the city and its components, and discusses the social & economical approaches and solutions for better growth.

Logistical transportation, appropriate technologies, traffic, infrastructure, public participation, and government support are all affecting factors, which will be discussed and maneuvered through in this conference.

This international conference is open for students, researchers, engineers, scholars from all universities all around the world as they are all invited to submit their articles to discuss all matters related to strategies of urban transit; a distinctive element of the Urban transit and the Environment series is the interaction between academic and practical perspectives where theories and ideas are debated and their practical applications rigorously tested.

At the end of conference you will:

- Learn new techniques from transportation industry leaders from all around the world and also from successful case studies in transportation.
- Know more about sustainable transportation and its role.
- Know how to improve traffic system by using methods, plans and technological systems.
- Understand transportation planning trends, Transport modelling and urban transport simulation.
- Design better roads for pedestrians.
- Learn more about how to make the best use of lands.
- How to deal with pollution and climate change in planning.
- Understand environmental impacts with different environmentally friendly transportation modes.
- Learn about transport strategies, public transport systems, transport safety, and security infrastructure.
- Know more about transport policy and regulations, with intelligent transport systems.
- How to deal with electro mobility and urban space.
- Understand merging transport systems and energy efficiency.

UTSN Publication

The conference proceedings will be published in Academic Research Community Archive (ARChive) hosted by IEREK Press or CRC Press of Taylor & Francis depending on the author's preference. Only selected papers will be published in a book series by Springer.

See: <https://www.ierек.com/events/urban-transit-and-sustainable-networks>

Urban Transit and Sustainable Networks (UTSN)

Program

Wednesday, 25th October 2017

08:30 – 09:00 || Registration of Participants, building n.7, ground floor

09:00 – 11:30 || Opening Ceremony at Aula Capitò, building n.7, ground floor (CHAIRMAN: Francesco Lo Piccolo)

Greetings and presentation by the two organizing institutions:

09:00 – 09:10 | Rosario Crocetta, Governor of Sicilian Region

09:10 – 09:20 | Leoluca Orlando, Mayor of Palermo

09:20 – 09:30 | Fabio Mazzola, Vice-Rector of University of Palermo

09:30 – 09:40 | Maurizio Carta, President of Polytechnic School, University of Palermo

09:40 – 09:50 | Andrea Sciascia, Director of Department of Architecture, University of Palermo

09:50 – 10:00 | Goffredo La Loggia, Director of Department Ingegneria Civile, Ambientale, Aerospaziale, dei Materiali, University of Palermo

10:00 – 10:10 | Fabio Naselli, Scientific Director IEREK Europe

10:10 – 10:20 | Abdelaziz Saqr, IEREK General Director

Interventions of Public Authorities & Research Institutions:

10:20 – 10:30 | Graziano Delrio, Minister of Infrastructures & Transports

10:30 – 10:40 | Pasqualino Monti, System Harbour Authority of Palermo

10:40 – 10:50 | Donato Carlea, responsible of Provveditorato Interregionale per la Sicilia e la Calabria, Ministero delle Infrastrutture e Trasporti

10:50 – 11:00 | Francesca Moraci, Administrative Board Member of ANAS, University of Reggio Calabria

11:10 – 11:15 | Silvia Viviani, president of INU (National Institute of Urban Planning)

11:15 – 11:20 | Paolo La Greca, president of INU (National Institute of Urban Planning) in Sicily

11:20 – 11:25 | Francesco Miceli, President of Order of Architects, Planners, Landscape Architects and Conservative Architects of Palermo

10:25 – 11:30 | Francesco Lo Piccolo, (Past president of AESOP Association of European Schools of Planning, coordinator of BSc and MSc in Urban, Regional and Environmental Planning, University of Palermo)

11:30 – 12:00 || Coffee Break

Urban Transit and Sustainable Networks (UTSN)

12:00 – 13:30 || Introduction to the Conferences (CHAIR: Maurizio Carta)

12:00 – 12:30 | Brief general introduction to the Conferences by the Chairman *Ferdinando Trapani*

12:30 – 13:00 | Topic editor's choice for the UPADSD2 Conference by *Maurizio Carta*

13:00 – 13:30 | Topic editor's choice for the UTSN Conference by *Marco Migliore*

13:30 – 14:30 || lunch break

14:30 – 16:00 || UTSN Lectures by the Keynote speakers

Bridging: The role of the ports and of infrastructures for the economic and social integration of Mediterranean Basin

Introduction – **Francesco Russo**, Mediterranean University of Reggio Calabria

14:30 – 15:00 | **Maria Attard**, Director of the Institute for Climate Change and Sustainable Development, University of Malta

15:00 – 15:30 | **Enzo Siviero**, RMEI, Réseau Méditerranéen des Ecoles d'Ingénieurs, Rector of E-Campus University

15:30 – 16:00 | **Francesco Russo**, University of Reggio Calabria

16:00 – 16:30 || Coffee Break

16:30 – 17:00 || UPADSD2 Lectures by the Keynote speakers

Bridging: Cultural Gateways & Urban Strategies

Introduction – **Michelangelo Russo**, Dept. of Architecture, University of Naples "Federico II"

16:30 – 17:00 | **Michele Sbacchi**, Department of Architettura, Università degli Studi di Palermo
"Reversible sustainability"

17:30 || End of works

21:00 - Gala Dinner

Urban Transit and Sustainable Networks (UTSN)

Thursday, 26th October 2017

08:40 - 13:30 || Parallel Session at 'Aule Satelliti' (building n.7, Viale delle Scienze, Palermo)

Room 3 Session T1

Chairman: **Marco Migliore**

Moderator: Francesco Castelluccio

08:40 – 09:00	The role of the integrated public transport network for reducing the congestion in the city of Palermo <i>Author: M. Migliore</i>
09:00 – 09:20	A Study on the Perception of the Provision of Bicycle Facilities to Increase Bicycle Commuting in Central Business Districts in Metro Manila <i>Author: Jun Castro</i>
09:20 – 09:40	Development of Urban Transportation System <i>Author: Adris Ade Putra</i>
09:40 – 10:00	Land Use of Urban Public Transport Systems <i>Author: Andreas Gassner</i>
10:00 – 10:20	Sustainability Development of Smart Public Transportation in Globalization <i>Author: Otilija Sedlak</i>
10:20 – 10:40	Land use, transport and sustainability: Spatial analysis of commercial centers and public transport interaction in Jeddah <i>Author: Mohammed Aljoufie</i>
10:40 – 11:00	European Road Safety Policy 2016: a Forecast on Topics and Activities <i>Author: Armin Kaltenegger</i>

Urban Transit and Sustainable Networks (UTSN)

11:00 – 11:30 | Coffee Break

Room 3 Session T2

Chairman: **Marco Migliore**

Moderator: Francesco Castelluccio

11:30 – 11:50	The relevant direction of vehicle movement for checking operational speed at the roundabout <i>Author: Sanja Surdonja</i>
11:50 – 12:10	Organic transportation networks: human-oriented renewal of modern megapolises <i>Author: Oleksandr Galychyn</i>
12:10 – 12:30	Supporting mobility across European cities through physically active-friendly urban environments <i>Author: Rosina Ndukwe</i>
12:30 – 12:50	Disturbance Management and Information Availability in Public Transport, with Focus on Scania County, Sweden <i>Author: Åse Jevinger</i>
12:50 – 13:10	Energy and carbon efficiency of different forms of distribution in Vietnam and a comparison with France <i>Author: Lam Quoc Dat</i>
13:10 – 13:30	Door to Door Culture of Commuters: It's Impact in the Road Carrying Capacity <i>Author: Jocelyn Rivera-Lutap</i>

13:30 – 14:30 | Closing Session & Light Lunch

Urban Transit and Sustainable Networks (UTSN)

Friday, 27th October 2017

Viale delle Scienze, Aula Capitò, building n.7, ground floor

09:00 – 11:00 || UTSN Lectures by the Keynote speakers

Bridging: Transport policies for the sustainable mobility

09:00 – 09:30 | Introducing and concluding: Marco Migliore, Dept. of Ingegneria Civile, Ambientale, Aerospaziale, dei Materiali, University of Palermo

09:30 – 10:00 | Giuseppe Salvo, Dept. of Ingegneria Civile, Ambientale, Aerospaziale, dei Materiali, University of Palermo

“ ”

10:00 – 10:30 | Tullio Giuffrè, Libera Università della Sicilia centrale "Kore"

“ ”

10:30 – 11:00 | Matteo Ignaccolo, President of AIIT (Associazione Italiana per l'Ingegneria del Traffico e dei Trasporti)

“ ”

11:00- 11:30 || Coffee break

11:30 - 13:30 || UPADSD2 Lectures by the Keynote speakers

Bridging: Policies, Plannings and Designs, for the Sustainable Cities

11:30 – 12:00 | Introducing and concluding: Maurizio Carta, President of Polytechnic School, University of Palermo

12:00 – 12:30 | Stefano Moroni, Department of Architecture and Urban Studies, Politecnico di Milan

"Different forms of decentralization: opportunities and risks"

12:30 – 13:00 | Zeila Tesoriere, Department of Architetture, University of Palermo

"Just what is it that makes today's infrastructure so different, so appealing? A disciplinary realignment"

13:00 – 13:30 | Renzo Antonio Lecardane, Department of Architetture, University of Palermo

"Green infrastructure and climate change. Paris: reinventing the Seine Axis"

Conclusions by conferences chairman **Ferdinando Trapani**