

**INVITED SESSION SUMMARY****Title of Session: Multi-Agent Systems in Transportation Systems****Name, Title and Affiliation of Chair:**

Dr. Mahdi Zargayouna, IFSTTAR, France

**Details of Session (including aim and scope):**

The purpose of this session is to bring researchers and practitioners together to discuss how agents and multi-agent systems technologies can be used to model, simulate, optimize and manage nowadays large-scale, heterogeneous, multimodal and complex transportation systems. We are looking for research papers, case studies and practitioners' reports on the implementation and use of multi-agent systems in all areas related to all the modes of transportation and logistics.

**Topics:**

- ✓ Applications of Multi-Agent Systems in traffic, transportation, and transport logistics
- ✓ Optimization (e.g., traffic assignment, routing, route choice)
- ✓ Autonomic transportation systems
- ✓ Coordination in intelligent transportation systems
- ✓ Intelligent, adaptive traffic control
- ✓ Distributed decision making in traffic, transportation and transport logistics
- ✓ Multi-agent systems for intelligent vehicles
- ✓ Mobile devices in smart transportation systems
- ✓ Autonomous vehicles and collaborative driving
- ✓ Self-\* properties of traffic systems
- ✓ Agent-based approaches to modelling driver behaviour
- ✓ Agent-based simulation of traffic and transportation systems
- ✓ Agent-based pedestrian and crowd simulation
- ✓ Shared and on-demand mobility (car sharing, ride sharing, Mobility as a Service, etc.)

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):**

- Dr. Jean-Michel Auberlet (IFSTTAR, France)
- Prof. Favien Balbo (Mines Saint-Etienne, France)
- Prof. Dariusz Barbucha (Gdynia Maritime University, Poland)
- Prof. Khaled Ghédira (Central University, Tunisia)
- Prof. Francziska Klugl (Orebro University, Sweden)
- Prof. René Mandiau (Valenciennes University, France)
- Prof. Philippe Mathieu (Lille University, France)
- Prof. Omer Rana (Cardiff University, UK)
- Dr. Julien Saunier (Mines Saint-Etienne, France)
- Prof. Gérard Scemama (IFSTTAR, France)
- Dr. Giuseppe Vizzari (UNIMIB, Italy)

**Website URL of Call for Papers (if any):**<http://amsta-19.kesinternational.org/cms/userfiles/is01.pdf>**Email & Contact Details:**[hamza-mahdi.zargayouna@ifsttar.fr](mailto:hamza-mahdi.zargayouna@ifsttar.fr)