

# ELECTRICAL, ELECTRONICS AND COMMUNICATIONS ENGINEERING

## DM 630/Fondazione LINKS - 6G Networks for Mobile Autonomous Systems

<b>Funded By</b>	FONDAZIONE LINKS - LEADING INNOVATION & KNOWLEDGE FOR SOCIETY [P.iva/CF:11904960017] MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584]
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<b>Context of the research activity</b>	Next-generation mobile networks and services for Connected Autonomous Mobility  Progetto finanziato dal PNRR a valere sul DM 630/2024 - CUP E14D24002420004
<b>Objectives</b>	<p>The Connected Autonomous Mobility (CAM) emerges as a major stakeholder for 6G networks. Such networks will lead to ground-breaking scenarios that extend beyond road vehicles to include all actors in mobility, creating a unified intelligent transportation and communication system. Despite the results achieved, complex technical challenges have still to be addressed to define more flexible and programmable networks providing improved performance.</p> <p>The goal of the research activity is to address such challenges pursuing the definition of smart 6G networks for CAM. Novel network management techniques, including zero-touch management and resource orchestration approaches will be developed, also exploiting the enhanced capabilities offered by AI algorithms. The study will enable the creation of a self-managed IoT-edge-cloud continuum where future CAM applications can fully exploit the flexibility and capabilities of 6G. The associated volume of computation-intensive tasks will be managed by the envisioned programmable and configurable 6G networks which will provide support for high-performance artificial intelligence. This will allow handling computer vision and reasoning tasks for the considered cooperative and distributed approaches, paving the way for the “connected intelligence” concept.</p> <p>Importantly, LINKS Foundation is involved in international initiatives and alliances and the above activities will contribute to the development of</p>

6G/CAM ecosystems in Torino.

**Skills and  
competencies  
for the  
development of  
the activity**

Good programming skills  
Knowledge of mobile networks