

# Agreement of Establishing the “Belt and Road Joint Laboratory on Optical and Wireless Fusion Communication for Modern Transportation”

**This agreement is entered into by Southwest Jiaotong University (hereinafter referred to as "Party A") and University of Kragujevac (hereinafter referred to as "Party B"), to establish the "Belt and Road Joint Laboratory on Optical and Wireless Fusion Communication for Modern Transportation" (hereinafter referred to as "the Laboratory").**

## **Preamble**

Recognizing the importance of advancing global scientific and technological cooperation and aligning with the Belt and Road Initiative's goals of promoting innovation, connectivity, and shared development, Party A and Party B agree to collaborate on cutting-edge research in the field of optical and wireless fusion communication for modern transportation systems.

## **Objectives**

1. To promote joint research and development in modern transportation communication technologies, combining the strengths of optical and wireless communication.
2. To establish a high-level platform for scientific exchange, talent cultivation, and innovation.
3. To address critical challenges in transportation and communication under high-mobility scenarios, contributing to global sustainability and technological advancement.

## **Research Directions**

The Laboratory will focus on the following research directions:

1. High-Mobility Optical and Wireless Communication: Research on hybrid communication systems for applications such as high-speed railways, autonomous vehicles, and aviation networks.
2. Optical and Wireless Integration: Development of technologies that integrate optical communication (e.g., visible light, infrared) with wireless networks (e.g., 5G/6G).
3. Energy-Efficient Communication: Innovations in low-power, high-efficiency communication for modern transportation systems.
4. Smart Transportation Systems: Leveraging artificial intelligence and big data for intelligent routing, traffic management, and real-time communication.

## **Roles and Responsibilities**

Party A:

1. Provide financial and technical support for research activities within the Laboratory.
2. Facilitate infrastructure development and equipment procurement.
3. Lead initiatives for student and faculty exchanges, joint conferences, and workshops.

Party B:

1. Contribute expertise and technical resources to collaborative research projects.
2. Support the publication of high-impact scientific papers and patent applications.
3. Facilitate access to local industries and stakeholders for pilot studies and demonstrations.

### Cooperation Mechanisms

1. **Joint Research:** Both parties shall co-develop research proposals and implement projects under mutually agreed frameworks.
2. **Talent Development:** The Laboratory will host exchange programs for researchers, students, and technical staff from both parties.
3. **Knowledge Dissemination:** Jointly organize international conferences, seminars, and training sessions to disseminate research findings.

### Intellectual Property

The ownership and utilization of intellectual property (IP) resulting from the Laboratory's activities will be jointly determined through separate agreements on a case-by-case basis.

### Term and Termination

This agreement will remain in effect for an initial term of 5 years and may be renewed upon mutual consent.

Either party may terminate the agreement with a written notice of 12 months, ensuring the completion of ongoing projects.

### Miscellaneous

Any disputes arising from this agreement will be resolved amicably through consultation.

Southwest Jiaotong University,  
China

University of Kragujevac,  
Serbia

By: \_\_\_\_\_

Xuedong Yan (闫学东)  
President

By: \_\_\_\_\_

Prof. Dr. Vladimir Ranković  
Rector

Date: \_\_\_\_\_

Date: \_\_\_\_\_