FUTURTRANS
Joint Indo-German Collaborative Research Center on Intelligent Transportation Systems

Technical University of Munich

Indian Institute of Technology Kharagpur
Objectives

- Establish a joint research CENTER between Technische Universität München (TUM) and Indian Institute of Technology – Kharagpur (IIT-Kgp) and Industry partners from both Germany and India

- Scientific focus - Future transportation systems for Indian cities
  - Integrated end-to-end public transportation system
  - India specific automotive technology
  - Collaborative development of automotive systems

- In this phase, methodologies for establishing such a CENTER and its efficient functioning will be investigated
End-to-End Transportation Systems

Germany

India

http://www.mvv-muenchen.de/
India-specific Automotive Technology

- India presents huge business opportunity for German automotive industry
- Indian traffic and road conditions are significantly different from Germany
- Cars designed for Germany are not directly suitable for India
- Focus should be on developing India-specific automotive technology
Collaborative development of automotive systems

- Innovation in automotive happens mainly in software
- India has developed as major software hub
  - Banking, financial and business software development
- Automotive software is significantly different
- Germany is the world leader in automotive industry
- Combining German automotive knowledge with Indian software expertise
Commitments from partners

**IIT-Kharagpur**
- Provide space for setting-up the center
- Actively engage its faculty members
- Visit TU Munich as Guest professors offering courses
- Gather additional funding for long-term sustainability
- Approach Indian companies to participate in center

**TU Munich**
- Organize joint meetings, workshops and seminars
- Explore methodologies for long-term sustainability of the center
- Hosting faculty members and students from IIT-Kgp
- Setting-up joint Doctoral and Master’s programs
- Actively try to engage German industry partners
Expectations and Challenges

**Expectations**

- Long-term sustainability of the center
- Promoting Indo-German activities (both academia and industry)
- Channeling research results into both Indian & German industry
- Joint Doctoral and Master programs between TUM & IIT-Kgp
- Facilitating various forms of personal exchange increasing knowledge-sharing

**Challenges**

- Over next 5 years gathering funding for Indian academic partner
- Obtaining funding for running the center in long-term
- Intellectual Property (IP) related issues
Progress

• IIT-Kharagpur has allocated office space in the campus for hosting the center

• Had meetings with Robert Bosch, Tata Motors and Tata Consultancy Services in India and obtained their support for participation in the center

• Will organize first workshop to be held in April 2018 at IIT-Kharagpur

• Nominated Prof. Pallab Dasgupta and Prof. Debarati Sen from IIT-Kharagpur for TUM-IAS Hans Fischer fellowship to fund their stay at TU Munich for extended collaboration

• 15+ faculty members from both TUM and IIT-Kgp have expressed their interest in participating in the center.

• Setting up of joint programs on transportation and automotive systems