

# **ACE Impact Pre-identified Regional Development Challenge Transport**

## **Terms of Reference**

### **Guidance**

Proposals that respond to the Transport Pre-identified Regional Development Challenge should address the following Terms of Reference (ToRs) in the appropriate section of the proposal. While it is unlikely that a single proposal can address all of the ToRs, the proposal should make a substantial, credible effort to respond in a way that presents a cohesive, integrated program of education, research and partnership activities that aligns both with the ToRs and with the goals of the ACE Impact project.

### **Background**

Africa faces three urgent transport challenges: the continent has the highest rate of road fatalities in the world; it has an unprecedented growth rate of urbanization; and it has the highest transport costs in the world.

Over the next 25 years, an additional 500 million people will live in African cities, yet many of these cities are ill-equipped to provide sustainable mobility for all. At the same time, technologies are changing how people travel in cities across the world. Primary topics of concern are the new mobility patterns that are emerging through technological innovation and disruption.

- How are the rapidly evolving technologies influencing the transport sector investments, services and policies in the Africa context?
- What can Africa do better to utilize research talents and resources within the academic community leveraged to play its role in capacity building in the region and educating the next generation of transportation professionals?
- How can the digital era leapfrog the transformation of the informal paratransit sector and unleash the private sector's potential in the transport sector?

### **Terms of Reference**

- I. The selected Africa Center of Excellence in Transport will consider the following skills related aspects of the Development Challenge
  1. Transport Economics and the Digital Era
  2. Transport and Urban Planning in Smart Cities
  3. Innovative and Sustainable Traffic Management Solutions
  
- II. To address the skills needs, long-term degree programs available through the Center should include:

<b>Master's Degree Programs</b>
1. M.S. in Transport Economics
2. M.S. in Transport and Smart Cities
3. M.S. in Sustainable Traffic Management

<b>Ph.D. Programs</b>
1. Ph.D. in Transport Policy (with a focus on the digital era)
2. Ph.D. in Transport Infrastructure Financing
3. Ph.D. in Integrated Logistics

III. To address professional trainings needs, short term courses should include:

<b>Short Term Courses</b>
1. Leadership training in transport planning
2. Leadership training in road safety

IV. The selected Africa Center of Excellence in Transport will consider the following research themes of the Development Challenge

1. Digitization and optimization of public transport systems/networks
2. How can digitalization help formalize and modernize the informal transport sector in Africa cities?
3. Real time traffic management in smart cities

V. The selected Africa Center of Excellence in Transport will undertake an applied research program that includes the following topics:

<b>Applied Research</b>
1. Green logistics for sustainable urban development
2. Smart transport in smart cities
3. Sustainable transport modes: autonomous vehicles and new urban design

VI. The selected Africa Center of Excellence in Transport will have an established network of core industry/sectoral partners identified in the proposal, including:

1. Government agencies/ministries
2. Municipalities
3. Transport and logistics industry stakeholders
4. ICT and digital solution sectors

VII. The selected Africa Center of Excellence in Transport will have an established network of academic and/or research institute partners identified in the proposal, including:

1. Regional and pan-African universities that maintain active education and/or research activities focused on transport
2. Recognized global universities and research centers that maintain active international research collaborations focused on transport.