



our future through science

Open Call for Participation in Smart Logistics workshop

Call No. SOLFAC/2017

Date of Issue	10 March 2017
Closing Date (extended to)	Friday, 24 March 2017
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1 INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR is represented by regional offices throughout South Africa, the main site being situated in Pretoria.

The CSIR Meraka is the Information, Communication and Technology research unit within the CSIR that has a strong focus within the domain of data science. Some activities within this space include the skills development of future data scientists and several projects for government departments related to the adoption and application of analysis tools.

The CSIR Built Environment is the unit involved with research activities within the logistics domain, and is the unit that helped to pioneer the Smart Truck initiative in South Africa. Both units have partnered on an initiative towards the concept of Smart Logistics and this open call is concerned with soliciting interest from stakeholders that work within this space.

2 BACKGROUND

The Logistics Barometer Report for South Africa states the cost of Logistics in 2016 accounted for 11.8% of GDP, totalling R499 bn, with 55% of this (R274 bn) attributed to transportation. Of all goods transported in 2016, 84.8% was transported by road using heavy vehicles. Neglect to prioritise this area has resulted in rising costs and excessive road fatalities linked to heavy vehicle freight transportation. The CSIR is interested in pursuing interventions that would be able to aid in a reduction both in cost and road fatalities. To this end, the Road Traffic Management System (RTMS) was developed together with Performance Based Standards (PBS) to regulate heavy vehicles. The RTMS has shown effectiveness at improving both of these metrics, with a 30% reduction in transportation costs and in excess of a 60% reduction in crash rates of heavy vehicles. The PBS pilot project, a subset of the RTMS, has shown a further 35% reduction in crash rates and a weighted average 28.5% reduction in heavy vehicle trips to transport the same freight.

The PBS data and anonymised heavy vehicle data was used as the basis for a data science concept where students were allowed to innovate and create a dashboard that could analyse the information and present in a meaningful way to several different stakeholders. This dashboard seeded the idea that there may be viability for similar tools to be of use to the entire logistics sector; however the focus will first be for road freight logistics.

3 INVITATION FOR OPEN CALL FOR PARTICIPATION

The CSIR proposes an information sharing workshop with interested parties and stakeholders in the logistics sector to voluntarily participate and share their views on the viability of such tools for analysis of their data. This workshop is open to all stakeholders that work within the freight logistics sector and extends to other organisations that may indirectly be involved in the industry as well.

4 OPEN CALL CRITERIA

The CSIR requests that submission for participation be sent satisfying the criteria stipulated below.

All submissions will be adjudicated by the CSIR to ensure that the following basic criteria are met:

- i. The stakeholder **MUST** be linked to the freight logistics sector directly;
- ii. The stakeholder **MUST** provide proof of such linkage as stated in (i) above.
- iii. The stakeholder **MUST** provide details of the organisation including a brief background and nature of business activities.
- iv. The stakeholder **MUST** operate within the borders of South Africa.

All submitters should note that:

- a) These basic criteria may change based on changes to the project scope;
- b) The CSIR offers no guarantee that all submissions will qualify to participate in the full workshop; and
- c) This process is **NOT** a procurement or contracting process between the CSIR and the submitting organisation

5 SUBMISSION REQUIREMENTS

All submissions to this Open Call must have the following items:

1. A cover letter from the submitter's organisation addressed to:

ATT: Mr. D. Seetharam
Project Manager
CSIR Meraka Institute
RE: Open Call-Smart Logistics (REF: SOLFAC/2017)
2. The cover letter must contain the following details:
 - a) The name of the organisation and submitter;
 - b) Contact information (submitter name, business address, phone, fax and e-mail);
 - a) A description of the organisation's business activities in the logistics sector;
3. All submissions must be in electronic format and attached to an email submitted to dseetharam@csir.co.za with the subject line:

Open Call-Smart Logistics (REF: SOLFAC/2017)

6 ELIMINATION CRITERIA

Responses will be eliminated under the following conditions:

1. Submission after the deadline of **Friday, 24 March 2017**;
2. Submissions that are **NOT** in electronic format (e.g paper-based or CDs);
3. Submission that do not fulfil the Open Call Criteria in Section 4.