



## **Request for Proposal (RFP) for Development of Speech Technologies in Indian Languages**

***TDIL Programme, Dept. of Electronics & Information Technology, Govt. of India invites project proposals in the strategic areas of Speech and Mobile technologies in Indian Languages to realize the National Vision of “Voice based Information Access in Indian Languages”***

### **1. Introduction and Background of DEITY**

Department of Electronics & Information Technology, Ministry of Communications & Information Technology Govt. of India promotes e-Development of India through multi pronged strategy of e-Infrastructure creation to facilitate and promote e-governance, promotion of Electronics & Information Technology-Information Technology Enabled Services (IT-ITeS) Industry, providing support for creation of Innovation / Research & Development (R&D), building Knowledge network and securing India's cyber space. [Details at : <http://www.deity.gov.in>]

### **2. TDIL Programme & Its Objective**

Technology Development for Indian Languages (TDIL) Programme is a Flagship Programme of Department of Electronics & Information Technology (DeitY), Ministry of Communication & Information Technology (MC&IT), Govt. of India has the objective of developing Information Processing Tools and Techniques to facilitate human-machine interaction without language barrier; creating and accessing multilingual knowledge resources; and integrating them to develop innovative user products and services. The Programme also promotes Language Technology standardization through active participation in International and national standardization bodies such as ISO, UNICODE, World-wide-Web consortium (W3C) and BIS (Bureau of Indian Standards) to ensure adequate representation of Indian languages in existing and future language technology standards. [<http://www.tdil.mit.gov.in>]

#### **Objectives:**

- Research and Development of Multilingual Computing in all 22 Constitutionally Recognized Languages
- Proliferation of Language Technology Solutions
- Development of Standards related to Language Technology

### **3. Problem Definition & Broad Objective**

#### **Problem Definition:**

Development of Voice-based information access in Indian Languages for Mobile and Wireless Hand-held devices as well as for desktop computing environment. A concept paper on the same is available at : \_

[http://tdil.mit.gov.in/pdf/RFP/Concept\\_Proposal\\_for\\_Voice\\_based\\_Information\\_Access.pdf](http://tdil.mit.gov.in/pdf/RFP/Concept_Proposal_for_Voice_based_Information_Access.pdf)

#### **Broad Objective:**

- (1) To develop and deploy the technologies such as Text-to-Speech, Automatic Speech Recognition for voice based interface for citizen centric e- applications especially under the National E-Governance Framework using the National Cloud Infrastructure.
- (2) To carryout long term research to incubate innovation and new breakthroughs in the speech and Mobile technology domain and their implementation in Indian Languages.
- (3) To address the standardization needs of fast changing Speech mobile ecosystems especially with respect challenges of Indian Languages.

### **4. Technology Areas**

- (1) Speech Resources in Indian Languages
- (2) Technology development for Text to Speech, Automatic Speech Recognition, Voice based search and Speaker & Language Identification
- (3) Voice Biometrics
- (4) Application development having focus on Mobile and Wireless platforms
- (5) Testing, Evaluation and Standardization.

### **5. Proposal Details**

Comprehensive project proposal may be submitted clearly specifying the technological problems to be addressed, expected outcome, deployment plan and budget requirements. The project proposal should contain the following details:

#### **5.1 Technical Details**

- 1) Executive summary
- 2) Detailed Technical Aspects
- 3) Implementation Mode
- 4) International Collaboration proposed (if any)
- 5) Pert-Chart

#### **5.2 Proposed Budget Details**

- 1) Year-wise Budget Breakup
- 2) Clear Specification of Manpower and Equipment details

### **6. Evaluation of the Project Proposal**

The entire submitted project proposal will undergo rigorous evaluation by National Level Expert Committee at the first stage followed by evaluation by TDIL Working Group and DEITY Officials.

## 7. Who can Apply

An individual or Consortium of Indian University/ Institution/ R &D Organization may submit the project proposal. The Consortium Mode project may involve industry partner such as MSME or Large industry having DSIR recognized in-house R&D unit(s), in collaboration Indian University/ Institution/ R &D Organization.

## 8. Proforma: The details can be downloaded from: <http://deity.gov.in/content/scheme-forms>

## 9. Last Date:

TDIL Programme invites proposal round the year. However, to be considered in the next TDIL Working Group Meeting, the last date of submission of project proposal is 31<sup>st</sup> Mar 2015.

## 10. How to Apply

Completed Project Proposal both Soft and Hard-Copies (3) duly signed by the Chief Investigator and Head of Institution may be submitted to:

Swaran Lata  
Director & HoD  
TDIL Programme,  
Dept. of Electronics & Information Technology, Govt. of India  
Electronics Niketan  
6 CGO Complex  
Lodhi Road,  
New Delhi 110 003 e-  
mail: [slata@deity.gov.in](mailto:slata@deity.gov.in)  
Tel: +91-11-24363525, 91-11-24301272  
Fax: +91-11-24363525