

**Revised for extension of date upto 23.01.2023**

**I-16/50/2022-W&M  
Government of India  
Ministry of Consumer Affairs, Food and Public Distribution  
Department of Consumer Affairs  
Legal Metrology Division**

Dated: 06.01.2023

Expression of Interest (EOI)  
For  
Appointment of consultant/ consultancy firm  
For

Developing of policy and regulatory framework for the legislation of Indian Standard Time (IST) under the Legal Metrology Act, 2009.

**Time Dissemination project:**

(i) Precise time is essential for country's strategic and non-strategic sectors for navigation, tele-communication, internet, power grid synchronization, banking systems, digital governance, transport systems, financial transactions, defence systems, cyber physical systems, and upcoming technologies of 5G, artificial intelligence and internet of things. Precise time with nanosecond accuracy is also required for high-end research in science, namely, measurement of fundamental physical constants, detection of the gravitational waves, geodesy, deep space navigation, radio telescopes etc.

(ii) Presently the Indian Standard Time (IST) is not being adopted mandatorily by all Telecom Service Providers (TSP) and Internet Service Providers (ISP). They are utilizing the servers synchronized to other sources such as GNSS. It is imperative that all networks and computers within the country, especially those that cater to the real time applications to the strategic sectors for national security, be synchronized to the national time standard.

(iii) Considering the importance of dissemination of Indian Standard Time (IST), an ambitious project has been initiated by the Department of Consumer Affairs (DoCA) in coordination with National Physical Laboratory (NPL) and Indian Space Research Organisation (ISRO), to generate and disseminate accurate time traceable to IST with accuracies ranging from a few milliseconds to a few nanoseconds. The project aims to

create technology and infrastructure to disseminate IST from five sites across India to all the telecom operators, power grids, financial institutions, data centres, common citizens etc. These locations are the Regional Reference Standard Laboratories (RRSLs) of this Department at Ahmedabad, Bengaluru, Bhubaneswar, Faridabad and Guwahati. Upon completion, the project is expected to enhance the national security and reduce the error in time synchronisation.

(iv) The project shall establish time traceability to IST maintained at NPL. A Disaster Recovery Centre (DRC) of the Primary Time Scale generating IST at NPL is also being setup at Bangalore.

**This EOI is floated by the Department of Consumer Affairs for eliciting suitable proposals from consultants/ reputed agencies for meeting the following objectives:**

1. The appointed consultant/ consultancy firm shall prepare a policy framework for the legislation of usage of IST in India and should be able to prepare guidelines for the following use cases:
  - (i) Synchronization of all networks and computers to IST
  - (ii) Adoption of IST by TSPs, ISPs, power grids, Banks, stock exchange etc.
  - (iii) Mandatory adoption of Indian Standard Time (IST)
2. The appointed consultant/ consultancy firm shall carry out a detailed assessment of the requirements of time synchronisation, study best international practices in this domain and lay down plans and procedures for effective implementation of the above requirements.
3. The consultant/ consultancy firm shall accomplish the above tasks within a year of the signing of contract.
4. The consultant/ consultancy firm shall be required to make a detailed presentation about their proposal to DoCA as part of the consultant/ consultancy firm selection process.
5. Following are the deliverables from the selected consultant/ consultancy firm:
  - a. A detailed assessment of the requirements of time synchronization,

- b. A study of best international practices in this domain,
- c. Plans and procedures for effective implementation of the project, all leading to a comprehensive policy framework for the dissemination, synchronization and usage of IST in India.

6. Last date & time of submission of the expression of Interest (EOI) is 15 days i.e. upto 23.01.2023 at 3:00 PM on the email ids js-ca@nic.in, dirwm-ca@nic.in, ashutosh.agarwal13@nic.in or physically to Director, Legal Metrology, Room No 461-A, Krishi Bhawan, New Delhi-01.

  
(Ashutosh Agarwal)

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