

**PUNJAB STATE TRANSMISSION CORPORATION LIMITED****(PRESS NOTE)****OFFICE OF THE CHIEF ENGINEER / SO&C  
SLDC Building, 220KV Sub Station, PSTCL, Ablowal,  
PATIALA-147001.****Contact Phone No.: 0175-2358940****email : [director-opac@psebindia.org](mailto:director-opac@psebindia.org)****Expression of Interest (EOI) for GIS mapping of 220KV, 132KV & 66KV  
Transmission network under PSTCL**

Punjab State Transmission Corporation Limited (PSTCL) is having a large power transmission network in Punjab. PSTCL intends to implement GIS based system for mapping of its power transmission network comprising of about 650 nos. Grid Sub-Stations and transmission lines of 66 KV, 132KV and 220KV voltage level (total about 15000 Kms.) as well as route mapping/surveying of future lines.

PSTCL invites expression of interest (EOI) from experienced parties in the field of GIS mapping of large power transmission network of transmission utilities. The interested parties are requested to submit their technical proposal indicating their technical capability / experience in the field, details of job carried out alongwith relevant technical specification of the work, equipment involved etc.

The related information may be downloaded from PSTCL website "**[www.psebindia.org](http://www.psebindia.org)**" / "**[www.punjabsldc.org](http://www.punjabsldc.org)**"

Interested parties are requested to submit their offer duly Sealed in Quadruplicate at the following address latest by **15.00hrs on dated 27-8-2010**.

Dy. CE/Open Access,  
SLDC Complex, 220KV Sub Station,  
PSTCL, Ablowal, Patiala

# **Punjab State Transmission Corporation Ltd.**

**Expression of Interest (EOI)  
for  
GIS based system for Mapping of 220 KV, 132 KV  
& 66 KV Transmission lines and associated Grid  
sub - stations.**

*Last date & time for receipt of offer: 27-8-2010, up to 15.00hrs*

**OFFICE OF CHIEF ENGINEER / SO&C,  
SLDC Building,  
Ablowal, PATIALA-147001**

# Punjab State Transmission Corporation Ltd

**Subject: GIS based system for Mapping of 220 KV, 132 KV & 66 KV Transmission lines and associated Grid sub - stations**

## **1.0 INTRODUCTION:**

Punjab State Transmission Corporation Ltd. (PSTCL) is a State Transmission Utility responsible to build, operate and maintain a large EHV transmission network in Punjab. PSTCL has been established recently (April 2010) pursuant to unbundling of erstwhile Punjab State Electricity Board (PSEB). The transmission system owned by PSTCL comprises of 66KV, 132KV and 220 KV transmission lines (Total length about 15000 kms) and associated grid sub - stations (Total about 650 nos) located in the state of Punjab and a portion of it also falls in neighboring state Himachal Pradesh. PSTCL is also in the process of going in for expansion/up-gradation of existing system including 400 KV transmission system for evacuation of power from upcoming power projects and strengthening of existing system.

For better manageability and improve reliability and availability of system, PSTCL intends to implement a GIS based system for digital mapping of existing Transmission system as well as future transmission lines/sub-stations.

## **2.0 OBJECTIVE**

The main objective of this Expression of interest (EOI) is to explore the technologies available in this field and to develop a suitable project/ tender document including detailed technical specification after studying the offer. Creation of digital map is a step towards building a web enabled GIS for transmission network to know physical identification of its assets. The state of art technology would also assist in taking up optimum route survey of future lines and maintaining an accurate map of the network.

### **NOTE:**

Depending upon the response to the EOI, PSTCL reserves right to go in for empanelment /short listing of the prospective vendors for seeking detailed bids. However, merely participation in the EOI shall not be considered as a pre- condition or entitlement for participation in the final bidding process.

### **3.0 GENERAL INSTRUCTIONS :**

Following general instructions are to be followed by the parties while submitting EOI:-

1. The solution proposed shall be based on latest technology, preferably proven technology. **A detailed write up to be attached.**
2. The technology proposed shall be generic and modular in nature and shall be compatible with the IT applications/solutions as prevalent in utilities like SCADA-EMS and future IT applications like ERP-SAP, etc. The integration shall be seamless without requiring any up-gradation of the hardware and software proposed.
3. The role and responsibilities of GIS vendor shall be clearly indicated including that of PSTCL's too.
4. Offer shall include detailed technical specification indicating hardware, 3<sup>rd</sup> party GIS software, etc.
5. Offer shall include detailed account of proposed methodology for taking up field survey, indexing, etc along with details of man power to be deployed, acquisition of topography maps /satellite images from Survey of India,
6. The offered solution shall be web enabled and include query based MIS system for report generation.
7. Training modules for the PSTCL officers/officials shall be mentioned.
8. All relevant information /inputs shall be given to develop a draft RFP and detailed Technical Specification
9. The parties may be invited for giving a presentation on the solution offered and explain their past experience /qualification in support of their suitability for the project. An advance intimation for this event at Patiala., shall be given with one week notice. ( A hardcopy & power point softcopy of presentation to be attached in the proposal)
10. The parties shall give detailed account of their experience/expertise indicating their strengths. This must be supported with user certificates , PO details , performance report of any similar projects done earlier.
11. Tentative time lines required for the implementation of the project shall be indicated along with detailed activity wise PERT chart.
12. An indicative budgetary figures of the project shall be given in the offer.

#### **NOTES:**

PSTCL shall not be liable to reimburse any expenditure incurred by the party in connection with submitting the EOI document and participation in discussions/meetings/ presentation.

#### **4.0 GENERAL FEATURES:**

The broad features of the proposed solution shall cover the following but not limited to :

- The software used shall have the multi-users and multi-layers functionality.
- The GIS application software should be capable of digitizing Multi Circuit transmission network and displaying the same on map. On Clicking of multi circuit line, the configuration/attributes of a line should be displayed on map.
- Application shall be capable to run on remotely located Client machines using intranet/internet etc.
- Only database administrator should have the rights to add/edit/delete the database and should be password protected.
- Database administrator should have the right to add/edit/delete the users rights.
- Software should be provided “ Navigation tool” to allow user to view complete map.
- Software should have zooming facility also.
- Software should have facility to allow to view/find a specific Tower on the map , to find out the distance between two Towers / lines etc.

#### **5.0 OPENING OF OFFERS:**

The EOI/offers received on due date and time shall be opened on the scheduled date itself ( ie **27-8-2010** at **15.30 Hrs**) in the office of undersigned, in the presence of representatives who may like to be present.

In case the date of receipt/opening happens to be a holiday, the same shall be received/opened on next working day at same times.

Dy. Chief Engineer/Open Access,  
SLDC Complex, 220 KV sub station,  
PSTCL, Ablowal, Patiala