

## **Guidelines for implementation of “Enabling Schools with Smart Virtual Class Rooms Facility” Project.**

### **1.0 INTRODUCTION:**

The project titled as “**Enabling all Schools with Smart Virtual Classroom Facility -Phase-I**” is for establishing smart virtual class room facility in GOH secondary schools to enable remote classroom teaching and also to have an effective mechanism for monitoring the utilization of the virtual classrooms to realize the outcome of imparting education through virtual classrooms to the students of beneficiaries schools.

- 1.1 The project is intended to achieve “quality teaching through distant location” and also realising the concept of DIGITAL INDIA to its actual sense. The project is intended to bridge the digital divide between the urban and rural areas by facilitating and imparting school education from any remote location with the use of smart teaching aid equipments. The project is aimed to bring the benefits of information technology to the hitherto remote and relatively inaccessible areas of the country.
- 1.2 The smart virtual classroom facility may progressively be used for imparting Information Communication Technology (hereinafter referred as ICT) based education and training as well as enabling interface with the District Institute of Education & Training( hereinafter referred as DIET)/ GOH and for such IT enabled services as may be relevant to the needs of students.
- 1.3 The project is a non-commercial venture and all its initial assets, establishment cost and equipment maintenance expenses of virtual classroom infrastructure will be borne by DeitY for a maximum period of 3 years including procurement and set-up period. (hereinafter referred as project period).

The overall control of management, operations and smooth functioning of these facilities will vest exclusively with GOH, however ERNET being an implementing agency nominated for the above mentioned purpose by the DeitY, will carry out the complete project implementation and provide maintenance support for the project period. ERNET will also liaison with the designated GOH and DeitY authorities to attain required support during project period.

### **2.0 Objectives:**

Setting up of one smart virtual class room facility in each of the identified Govt. owned / controlled secondary school in seven pilot states of Haryana, Himachal, Gujarat, Rajasthan, Tripura, Andhra Pradesh and Tamil Nadu with a focus to improve the quality of education to students from remote/ rural part of the country. The project is aimed at creating a technology enhanced classroom that will foster opportunities for teaching and learning by integrating various relevant technologies, such as computers, electronic white boards, projectors, specialized software, interactive audio-video systems, etc. The total targeted number of schools and its corresponding DIETs distributed across the seven states are 3500 and 50 respectively.

### **3.0 Execution and Implementation methodologies:**

- 3.1 The Government of India, through the DeitY will provide funds to ERNET, being a project implementation agency to procure all equipments/ items, install and commission the supplied equipments and also to provide one day hands-on training to the identified staff (maximum of 02 staffs/ teachers from each project location) .
- 3.2 GOH would be responsible to finalize and handover a proportionate list of identified schools and DIET centres across the state which would comply to the pre-requisites mentioned in the checklist attached. ERNET will set up one Smart Virtual Classroom in each school as a remote receiving centre and Smart Virtual Classroom in each corresponding DIET (subject to confirming the check-list) in the state consisting of following components:
- (i) **Infra for Smart Virtual Class Rooms and Two-way Audio / Video Interaction Facility at Each School (including Software based Video Conference Equipment, PC, Electronic white board, projector, 1 KVA UPS one set in each school).**
  - (ii) **Infra for Smart Virtual Class Rooms and Two-way Audio / Video Interaction Facility at District Level (DIET) (Including HD Video Conferencing End points/ Codec along with Display screen, PC, Electronic white board, projector, 1 KVA UPS, one set in each DIET).**
  - (iii) **One day Training session on installed infrastructure for operational Staffs/ Teachers appointed by GOH.**
  - (iv) **System maintenance and support for operations / scheduling of classes.**
- 3.3 The GOH school authorities will schedule and run the distance classes from DIET to its corresponding schools by making use of the smart virtual classroom set-up. The course selection, study material and teaching staff coordination will be the sole responsibility of the state govt. authorities.
- 3.4 After completion of the Project period the complete project infrastructure installed in the state jurisdiction will be handed over to the GOH and the state would be responsible for control, maintenance; operations of the facilities created and evolve a mechanism to sustain it, though the ownership of the equipments/assets installed will continue to vest with DeitY and none of these equipments/assets can be sold off, transferred, parted with, without the prior written approval from DeitY. Also after completion of project the GOH may utilize the central site infrastructure facilities on mutually agreed operational charges with ERNET.

### **4.0 Responsibilities of GOH / Schools**

- 4.1 The GOH will appoint a state coordinator(s) and also nodal officers at each project location for smooth implementation of project. The nodal officers will be responsible for security of assets and also for functioning of Smart Virtual Class Room facility on an ongoing continuous basis
- 4.2 The access to the facilities provided at project locations will be fully secured and managed on a day to day basis by the GOH Administration through personnel

specifically trained for functioning of the technical equipment installed in these locations.

- 4.3 The GOH will devise its own procedures for orderly functioning of installed infra to ensuring optimum utilization thereof by the schools. While extending the facilities at selected schools, there will be no discrimination of any kind whatsoever amongst various sections of the community. The GOH may, however, prescribe such procedures as are intended to impose reasonable restrictions on the exercise of any right for utilization of facilities at these schools in the interest of the general public.
- 4.4 The GOH will bear all day-to-day recurring expenditure such as electricity, water, telephone charges, internet connectivity charges, stationary and Air conditioners if any for the up-keep of the ICT equipments.
- 4.5 The GOH will ensure that no levy in any form ( fees or charges) is being imposed for the use of Virtual smart classroom infrastructure provided under this project.
- 4.6 The GOH will provide required infrastructure support to the ERNET India for orderly functioning of project site. The GOH support will include, inter-alia, adequate and smooth power supply and also provisioning of electric cabling upto the equipments in the smart classroom, ensuring uninterrupted raw power supply and earthing of all the electric points to ensure due protection to the sensitive and expensive equipment intended to be installed at these sites, deployment of suitable person, and security of the premises and the equipments installed therein, as also providing adequate security to the personnel managing the location and to the end users.
- 4.7 The GOH will assist ERNET or its authorized vendor and shall extend all possible support for timely and successful implementation of the project.
- 4.8 The selection of the schools and DIETs in the state jurisdiction will be made by the State Administration in accordance with the check-list provided by ERNET and attached as annexure– I for ensuring suitability of the sites in the context of availability of infrastructure as may be deemed necessary for the purpose. **This activity is very critical for the successful implementation of project and accordingly be completed in a time bound manner.**
- 4.9 While earmarking the project locations, the GOH will ensure that the specifications laid down for the purpose by the ERNET India are fully met and a formal note in confirmation thereof will be recorded by the competent GOH authority and the concerned officer of the ERNET India, a copy of which will be made available for the records of the Government of India.
- 4.10 While making selection of the schools for setting up of Smart Virtual Class Rooms, the GOH will ensure availability of requisite infrastructure, provision of adequate security and due protection against any unlawful or immoral use thereof and will also devise the procedures for ensuring that these sites are not put to any immoral or unlawful usage.
- 4.11 The GOH will make arrangements for acknowledgement of receipt of the equipments at the schools and DIET delivered for Smart Virtual Class Rooms through its duly authorized officer/Principal/Head of the project location ,for installation thereof immediately, approaching the designated officer of the ERNET India for the purpose.

An acceptance testing certificate in confirmation of satisfactory installation of the above said equipments etc, duly signed by the designated officers of the GOH will be forwarded to ERNET.

- 4.12 The GOH will ensure safekeeping and custody of equipment delivered at their sites and shall ensure adequate security to the personnel and infrastructure at project sites and shall indemnify the ERNET for any loss resulting due to non-adherence of the above..
- 4.13 The GOH will assign specific responsibility with regard to the functioning of the Smart Virtual Class Room facility and safety of equipment installed therein to a local custodian, who may be the respective nodal officer/ Principal of the concerned school. The local custodian will, however, exercise his responsibilities in a diligent and faithful manner under the overall control of the custodian of the property, who will invariably be a State coordinator, preferably the Secretary school education in the GOH administration.
- 4.14 The GOH will be responsible for nominating officers/ staff of individual schools / DIET (maximum of 02 staffs/ teachers from each project location) for attending a one day training session to be organised by ERNET at respective DIET / or any other centrally located location of specific district.
- 4.15 The GOH will ensure continuous internet connectivity throughout availability (as per checklist) and will have the responsibility to liaison with respective local service provider in case of any fault, upgrade at their own expenses.
- 4.16 The GOH will ensure proper official seating arrangement with basic amenities for resident engineer, wherever deputed during the project.
- 4.17 Any loss/damage to ICT infrastructure deployed under this project, due to negligence, theft, power fluctuations, earthing issues etc, which are not covered under the warranty will be made good by the respective GOH within 30 days to ensure continuity of the project objectives.
- 4.18 In case of change of teachers/nodal officers, GOH will ensure that the new incumbent in replacement will be provided with requisite training for the operation of virtual classroom infrastructure using already trained staff at respective DIET centers.
- 4.19 Any of the individual equipment/ component which is a part/portion of the Virtual classroom infrastructure will not be put to use for any purpose other than the objective of this project. In case of a requirement of usage for any other central/ State government project, due written permission from the GIA organization i.e. DeitY has to be attained.

## **5.0 Responsibilities of ERNET**

- 5.1 Technical equipments conforming to state-of-the-art technology will be procured, delivered, installed and made operational at all project locations i.e schools, DIETs and Central location by ERNET India.

- 5.2 ERNET will be responsible for maintenance and operations of the equipments installed at project locations, which should not be tampered in any manner without prior approval and due consent of ERNET, so that the warranty clause applicable in respect of smooth functioning of the equipment can be timely enforced against the vendor, if the equipment is found to be defective or unserviceable in any manner, whatsoever.
- 5.3 ERNET will conduct the acceptance testing of the complete system installed by ERNET's appointed vendor in conformity to the ordered equipments.
- 5.4 ERNET will provide hands-on training to the nominated operational staff (maximum of 02 staffs/ teachers from each project location) for one day to ensure the proper operation and maintenance of Installed hardware and software.
- 5.5 ERNET will generate usage reports to ensure proper focus towards utilization of the deployed infrastructure by state governments to meet the objectives of the project.