

CONFERENCE OF ALL 32 CHANNEL COORDINATORS and DTH SWAYAM PRABHA TEAMS in BISAG, ECIL and
MHRD

DTH SWAYAM PRABHA Project for Educational Excellence

Date & Time: 26th Aug 2016 / 9:30 a.m. -- 05: 00 p.m.

Venue: Mamalla Resorts, East Coast Road, Mamallapuram, 45 kms. South of Chennai on the Coast

Minutes of the Meeting

Prof. Mangala Sunder, Chief Coordinator, SWAYAM Prabha chaired the meeting. The list of all who attended the meeting is given in the Annexure 1. The following issues were discussed. The recommendations of the Committee are given subsequent to discussions.

Channel Coordinator Inputs:

- The Conference commenced with the welcome address to the teams from MHRD, IIT's, IGNOU, CEC, NCERT, NIOS, ECIL and INFLIBNET and formal introduction by individual from the team.
- The agenda was briefly discussed. It was suggested that the launch date be scheduled in September at the earliest, with Sept 5, 2016, Teachers' Day in honour of Dr. Sarvepalli Radhakrishnan as a possible date.
- Channel coordinators and their groups presented the status. The issues that needed solution are quality of Videos by NPTEL which has begun recording only in High Definition format since two years ago and having them compressed to MPEG 4 with Standard definition broadcast requirement with aspect ration 4: 3 instead of 16:9. Also the videos used to stutter if the frames change rapidly due to movement of teachers or writing or any other effect. It was identified as due to the reduction in compression/up linking.
- CCE, managing ten channels felt that the process was moving too quickly—they are involved in MOOCs platform set up using the same set of videos and are grossly understaffed both for management of the activities and the day-to-day recording/editing/conversion including compression. Seed money for the programme was urgently needed.
- In recording videos, CEC suggested a narrative as well as a discussion format for many of its lecture programmes. It emphasized the need for feedback collection and analysing viewer responses early on.
- NCERT indicated that they had some initial delays in having drives based on Google cloud and therefore has been sending files using external hard drive to BISAG. NCERT also faced serious difficulties in having English and Hindi transcription of videos. However, NCERT informed that all its five Regional Institutes of Education are already on the job recording videos that would be broadcast.
- The National Coordinator from IGNOU informed that two of its content delivery channels do not have adequate number of videos and therefore immediate sanction of funds for production of videos is a must. She also suggested that standard templates and colour coding of text and background is a must. Funding for development of new material was not yet proposed and therefore, she requested the Chief Coordinator at IITM to take this up as a priority. IGNOU team also suggested policy guidelines for content developers and reviewers. Specification for content conversion to broadcast format was urgently needed to be standardized. IGNOU also had clear inputs of preparation of fillers as well as short documentaries. The roles and responsibilities of Channel coordinators are still vague and should be articulated at the earliest to ensure uniformity as well as quality in content production.
- NIOS coordinator proposed different names for the channels maintained by them. They would be called MOOC Vidya and MOOC Darshan instead of Secondary and Senior Secondary channels, respectively. NIOS needs additional bandwidth from NKN as it has difficulty with inadequate speeds. In addition funding the programme must be done as soon as possible.

They also required the use of Hindi and English in their programmes and proposed other languages would be introduced later.

- IIT PAL team suggested that it needed more time to complete adequate recording and editing for uploading contents and explained their current activities. Because many teachers from high schools are involved and the recording is happening at breakneck speed, they would be able to provide less than two weeks of content initially if the programme were to be launched around the first week of September. Many senior faculty members have also started doing this for the first time; hence many needed time to self-review the lectures carefully as the audience would be high school students.
- QEEE has been delivering lectures at the rate of 2 hours per day and has already started recording lectures of Professors online in order to repeat them after the live delivery.

Update of hardware - by Shri. Dinesh Jonna Vithula – ECIL

Shri. Dinesh Jonna Vithula of ECIL gave a summary of the equipment that had been delivered for the project at Ahmedabad. This was followed by a detailed summary of the broadcast setup and the studio lay out by Shri Arpit Doshi from Ahmedabad. The summary was that all equipment have been installed and issues with play out server are being addressed and the channels were on a trial run based on the input files provided by coordinators. BISAG has experienced serious network difficulty due to online uploads from 32 coordinators in a short span of time. Therefore, it needed help in regulating the flow. Mr. Doshi also discussed the file format with other coordinators based and the summary is given below. He mentioned that currently play out has not been set up for playing HD files compressed in HD mode and therefore suggested that all files be compressed in SD format. The facility will be up shortly after which HD files and SD files can be sent compressed in their respective forms without change of format.

Mr. Abishek Kumar from INFLIBNET presented the basic design of Website for programme management. It was suggested that file uploads be shared with BISAG and INFLIBNET so that between them they would be able to help each other downloading and copying the files for broadcast in time. In addition, he requested input in the design of the website and for all features for providing adequate information to users.

Presentation by Mr. Parameswaran- MHRD

Shri. Parameswaran, Senior Consultant from the Ministry gave the following inputs to be discussed and finalized for the project. He suggested that channels be specified for topics discussions early enough so that listeners will be directed accordingly. He recommended INFLIBNET to store a streaming version of the files telecast for viewers who missed a particular transmission, to access and download. He suggested that faculty follow up after the lectures by a session in which student queries were answered. This session would be informed to students well ahead of time. The Website should allow student feedback of the channels and mobile apps may be included for students to communicate via their mobile.

The following format specification and compression process have been arrived at after a technical group of experts from IGNOU/IIT's/ CEC/BISAG/INFLIBNET deliberated during the day. All channel coordinators would use the table given below to ensure that files are uploaded into their respective Google drives and allow both INLIBNET & BISAG to access them for downloading.

- **Channel setup –BISAG**
The file format would be
Frame Size: 720 x 576
Frame rate: 25 fps
Aspect ratio: 4:3 (standard definition)
Compression: MPEG 4, Audio 48KHz
Data rate: Minimum 2 Mbps, 3.5 Mbps or higher preferred.
File Format: MP4

- HD to SD conversion will be done at present at the channel coordinator end until play out server for HD compressed files to be broadcast without change of format is installed. Mr. Kannan of IIT Madras, Mr. Taneja of IIT Delhi and Mr. Rakesh Sharma of IGNOU will work with ECIL and BISAG to upgrade the play out and hardware recommended by all of them would be immediately ordered. Some simple tools such as letter box for previous recording and cropping for newly recorded material in HD would be used to minimise cropping of videos on the channel.
- All files to BISAG would be shared in the view mode unless otherwise required. Deleting the files after uploading is completed is Channel Coordinator's responsibility. BISAG will be helped by INFLIBNET in completing downloads and would indicate the Channel coordinator after it is done.
- IIT Madras will set up an archival backup of all files in the converted format.
- Each Institute, which created the master recording, will keep the master record and ensure that they have been labelled and stored properly. All master files would be stored in digital format without compression by the respective institutes. For the first couple of weeks /months offline delivery of content will be made if necessary.
- MHRD will request NKN to increase the network bandwidth speed of 1Gbps to help BISAG and INFLIBNET immediately.
- INFLIBNET would be requested to interact with SWAYAM Web development team of Microsoft for uniformity in website design and announcements.
- Regarding recording of videos by professors from outside of the Institute, travel norms of MHRD /Institute will be followed. The lecturer will do the scheduling so as to maximize the number of recording sessions in each visit. The seed money provided can be used for any immediate recording requirements.
- Lectures will be scheduled to commence on the hour except in rare instances when the recording is longer than 60 minutes. No cropping of such lectures will be done but the schedule will indicate the commencement time of delivery of the next lecture in each such case. For all other cases fillers will be provided by the channel coordinator and indicated by name in the timetable provided by them.
- All channel coordinators were requested to confirm the 1st month time table on or before 15th Sep 16
- Logos and symbols for each channel were discussed at length. It was suggested that each group of channel coordinators would provide one symbol (dynamic logo) at the earliest, dynamic logo which can rotate and have embedded the SP on one side and the group logo on the other side. Only one logo will appear in each channel and its placement will be dynamic during the first time delivery of the lectures. Repeat sessions will play out recorded sessions. Professor Mangala Sunder would circulate the initial set of channel logos designed by IIT Kanpur to all coordinators.
- For the time being call centres would not be operational but each channel will allow queries by users through the SP website. On designated days all such queries would be answered through e-mail /video delivery as the case may be.
- Excepting content for schools, all higher education content will be in English; obviously, non-English languages as the subject of learning will be in the respective language.

Prof. Mangala Sunder will send a draft budget proposal based on consultation with the channel coordinators that happened during the meeting, and will present the same to the Ministry. During the interim specific requests for cost covering the recording of a few sessions would be done on an as-the-case-may-be basis. He suggested that within a fortnight, a comprehensive budget plan would be presented to the Ministry by taking into account sanctions already made to NCERT, processes that are approved in IGNOU and finance allocations already approved by the Ministry on SWAYAM and SWAYAM Prabha. The budget would include cost of production and honoraria to faculty and coordinators as well as reviewers. In addition, documentary costs would be included.

As per the approval and direction from MHRD, Rs. 10 lacs per channel will be transferred at the earliest and Rs.3.2 crores to BISAG within couple of days. This can be used for initial experiment and trial. The funds would be used from then on for travel, human resource and operational costs.

As per the request of all channel coordinators present in the meeting, IITM will order ADOBE Enterprise Cloud licenses premiere to all the channels through a central acquisition of Adobe software by IIT Madras. Each channel will receive three licenses initially and would be provided additional ones if necessary. A Committee will be constituted for the purchase as required by IIT Madras for large volume software purchases. Members would be requested to help.

IIT Madras has already purchased two sets of workstations and the details would be shared with channel coordinators for them to place repeat orders if necessary. Since IITM rate contract and other Government and Audit approved processes are in place already, channel coordinators may obtain details from the Chief Coordinator if that is helpful. The Coordinators are, however, recommended to follow their institutional procedures as much as possible.

For an initial period of about three months one or two associates with editing experience are recommended to be hired for each channel, but where there are activities in parallel for more than one channel, the human resource is not a simple multiple. They may be hired optimally.

On copyrights of materials broadcast on the Television, attention of every one is drawn to the following:

- To ensure that videos shown have all legal permissions for public broadcast. These channels will be seen as representing the Government of India and therefore absolute rights for broadcast for an unlimited period and unlimited number of times is necessary. Videos borrowed from the other Ministry for addition as fillers must bear the public broadcast permission explicitly.
- Everyone recording the videos shall avoid using a document camera and highlighting published pages even if the lecturer is the author. Publishers, not the authors, own copyrights for distribution. Hence written permission must be obtained as above.
- To obtain written authorization from the creator if the video is intended for free use. To use a video freely does not allow one to distribute the same freely. Broadcast is a distribution in the legal sense.
- Channel music should be freshly recorded or permission to play should be provided by the composer and distributor.
- Please be careful in adding background music from other sources. Record one of your own wherever possible.
- Everyone shall avoid playing any YouTube Video. The laws forbid such activities. Links to such videos alone shall be broadcast.
- For all new contents use Creative Commons BY and SA until further orders from the Ministry.

Every Coordinator was requested to install one or two dishes in prominent locations in their institutes and inform the community about the videos being broadcast.

IGNOU Vice Chancellor suggested that a two day sensitization programme can be conducted for channel coordinators and invited all participants attend. The Conference endorsed the idea immediately. IGNOU was requested to give a tentative schedule/plan for the orientation program to all channel coordinators. At the request of Prof. Mangala Sunder, IGNOU also agreed to host an International Conference on Satellite Based Education in the month of November. Prof. Mangala Sunder was requested to provide a tentative budget along with specific dates for the Ministry to arrange the same in IGNOU, Delhi.

The Conference ended with a formal Vote of Thanks proposed by Shri. Dalip Kapur.

Annexure 1: List of participants.