

Empowered DTH Committee

The DTH Committee, constituted by the MHRD under NME-ICT project held the 10th meeting at 11:00 Hrs, on January 09, 2014 at Room No.112 C-wing, Shastri Bhawan, New Delhi.

The following DTH Committee members & members of various DTH Committees specially invited, attended the meeting.

1. Prof. S.V. Raghavan, Chairman DTH Committee and Scientific Secretary, Office of the Principal Scientific Adviser to Government of India.
2. Mr. Praveen Prakash, Mission Director, NMEICT & Joint Secretary (TEL), MHRD.
3. Prof. K. Mangala Sunder, Head Dept. of Chemistry, IIT Madras.
4. Mr. Ravi Saksena, Ex SAC/ISRO.
5. Dr. Ramanujan, Associate Director, C-DAC, Bangalore.
6. Mr. Ravi Kant, EMPC, IGNOU.
7. Dr. P. Prakash, Pro VC, IGNOU.
8. Prof Binod Agrawal, Director General, Taleem Research Foundation.
9. Mr. J.M. Kharche, Deputy Director General (Tech) Doordarshan.
10. Prof. Uma Kanjilal, Director, ACIIL, IGNOU.
11. Prof. Roy Satyaki, Associate Prof. IIT Kanpur.
12. Prof. Jayashree Shinde, Head Education Tech. Division, SNDT, Bombay.
13. Prof. Ashok Ogra, Director, APEEJAY Institute of Mass Communication, New Delhi.
14. Dr. G. Janardhanan, NITTER, Chennai.
15. Dr. Shahid Rasool, Director, EMMRC, Kashmir University.
16. Mr. Nageshwar Nath, Sen., Eng. CEC.
17. Prof Rajbir Singh, Director, CEC, New Delhi.
18. Mr. Pradeep Kaul, Sr. Consultant, NMEICT, MHRD and Convener, DTH Committee.

The remaining Committee members, due to their pre occupation, could not attend the meeting.

Welcome & Introduction by the Chairman:

1. Prof Raghavan welcomed all members for attending the 10th DTH Meeting & it being the first meeting of the year 2014. He especially welcomed Mr. Praveen Prakash, JS [TEL] who is attending the DTH meeting for the first time. Briefing members that the job for preparing RFP for establishing Teaching End (TE), studio etc., undertaken by IIT Madras, with the help of a nation wide committee, has been completed and the procurement and placement of equipment at 153 TE's is in its final stage. We have very tight agenda and timeline in front of us. He expressed that everything is in place and we are moving forward with a happy beginning for 2014. It is probably one of the few opportunities, the nation gets, to do things in style, all of us are going to be party of this and DTH rollout puts more responsibility on each one of us.

Briefing by the JS [TEL]

2. Mr. Praveen Prakash, JS [TEL], at the outset expressed that DTH is a project which everybody in the Ministry and in the country is excited about and is looking forward to. The Education Secretary, HE is very much keen to see the DTH project kicks off at the earliest and from ministry side he assured the members that all help required shall be provided to this project. He said a large number of people strongly believe that if IT based education initiative has to take place & reach masses in India, it would be through Television only, because of very high installation base of the TV.
3. Mr. Praveen briefed the members about the developments that had taken place since last DTH meeting; beginning with, the NMEICT project has now been extended till XIIth Plan, after the Government has accepted the mid term evaluation of the NMEICT. The NMEICT has received clearance of utilizing the funding available with it that was approved by the Cabinet in 2009. Besides this amount, the Government has made a commitment that Rs.1000 Crores or more shall be given to the NMEICT, if required. The bigger issue before us was, that MHRD had taken a stand that SATCOM policy drafted by the Dept., of Space and approved by the Cabinet was the policy under which our Satellite educational channels should have been provided permission to uplink channels and the permission on this was delayed for more than two years. The good news is that the issue is now settled, since the MHRD has entered into a MOU with Prasar Bharti and through this we will be seeking the NOCC, WPC & other clearances to uplink the DTH channels.
4. The next issue, was that the Finance section in the MHRD pointed out that the DTH project has an available funding of only Rs.120 Crores. Thanks to the lateral thinking of Prof. Raghavan, we could figure out that within the cabinet approval, a sum of Rs.401 Crores are available for satellite based educational content delivery under NMEICT and the IFD was convenience on this, accordingly Rs.50.00 Crores to IIT M has already been released. We have hardly spent any significant amount on the DTH project and have so far spent around Rs.8 Lakhs, advance to TCIL, for being advisor on uplinking tender related issues, (tendering to locate an Earth Station) and have further spent some amount on conduct of meetings in DTH.
5. Mr. Praveen Prakash added that after having got the assurance that clearance to uplink and funds in place, each one of us has to put all our energy we have, for the project and convert it to the benefit of students of our country. For meeting the DTH objectives, I have requested Mr. Pradeep Kaul to put his full time & commitment to the DTH Project, which he has gladly accepted. Mr. Kaul has to realize his vision of 50 channels and take us to bigger challenge of migration to 1000 channels; a channel for every subject.
6. During 9th DTH meeting, held on July 17, 2013, a number of decisions were taken; however the decisions could not be executed, because everybody was saying, first get the NOC and then concentrate on remaining issues. Since the issues have now been sorted out, we will now conduct all pending meetings. It is a huge project, talking to 150 TE's, coordinating 50 channels requires support from large number of best people in the country. IIT Madras has been kind enough to agree to anchor one of the DTH activity; we have also requested the CEC to be part of this project during roll out phase.
7. On the issue of forming DTH Organisational structure, it was felt that looking into the present day needs, the DTH Committee needs to be expanded so as to have Stake holders as

decision makers that can design, develop, monitor and roll out the DTH programmes. It may have the Heads of one or more Lead Institutes of different Core Groups (that are involved in providing the content) as was also discussed in the previous meetings.

8. Mr. Praveen Prakash, said, if we go back & have a look at the successful projects managed and executed in the country, we notice that National Knowledge Network (NKN) has been one such project, of which all of us can be proud of. Looking at NKN structure closely, we find that it has a Supervisory Body, followed by the committees that provide guidance on specific functions. For DTH management structure, if possible we may follow the DTH Organogram. Accordingly, it is decided that we should study NKN organisational structure, the relationship between NIC & different committees of NKN and form our own DTH structure. Further, CEC can be used by the DTH Committee for operational support. All this is required to be discussed and presented before the next DTH Committee.
9. Prof Raghavan however briefed the members that basic arrangement used in NKN structure, is to revitalize & re-energize the existing structure, we may have to do the same in case of CEC and do some re-structuring of it. It was reminded that a meeting with Director, CEC and Directors of all Media Centres was held on January 18, 2013 at MHRD and have discussed DTH project with them and we have also taken note of all the facilities, strengths, studios etc., available at CEC & its Centres and it has already been decided to utilise all that is available at all these Centres in the DTH programme.
10. It was suggested to plan setting up, by 15th May 2014, at least 10 TE's as Training Hubs for conduct of Trainings, Workshops, etc. The TE equipment, human resources etc., shall be provided at the designated location, however, such TE shall continue to be a normal TE after Launch of DTH Programme. The 9th DTH Committee meeting having constituted "e-Content expert committee" and the Committee having mandate to conduct trainings & workshops, may be involved in this activity. The Training Hubs may be created at CEC & at some of its EMMRC's. The CEC may be requested to assist to take up the job of conduct of workshop for Subject Co-ordinators, Teachers/ SME's, TE Co-ordinators etc. as per DTH Committee planning. The Mission shall provide necessary funding and as per budget allocated.

Confirmation of the Last Meeting minutes:

11. Minutes of the 9th DTH committee were mailed to DTH members (a copy of which was also provided to the members present). Since no comments were received from members on the minutes and some members lauded the comprehensive nature of the minutes. Chairman declared the minutes of the 9th DTH committee meeting as having confirmed.
12. Prof. Raghavan, said that since approvals required are available and as the IIT Madras has advance and provided by the MHRD; the Chairman sought to know from Prof Mangala Sunder, the current position on the tender whether the tender has been published and what is holding it.
13. Prof. Mangala Sunder briefed the members that the tender as on date has not been published, the IIT M has received Rs.50.00 Crores on the DTH activity; however, the sanction letter has been only been received today and the project account can now be opened at IIT M. Prof. Sunder assured the committee that the tender shall be released in newspapers by January 11, 2014.

14. Mr. Prakash reminded Prof. Sunder that a formal letter by MHRD has been sent to Director IIT M assuring that funds on establishment of TE shall be made available to the institute and he now intends to supplement it with another letter to IIT Madras, wherein the Ministry shall guarantee that whenever LC for the tender is likely to be opened, the additional funds required beyond Rs.50 Crores shall be made available to IIT Madras by MHRD.
15. Prof Mangala Sunder, IIT M requested the JS [TEL] to provide DTH operational budget to cover the conduct of meetings also and Budget provided should further have different Heads to help finance section at IIT M to operate the budget properly.
16. The Joint Secretary [TEL] mentioned he has gone through the RFP document for establishing TE's prepared by the TEEC and has found it most beautiful and best RFP design that he has come across, so far. The RFP has things required for a good tender document including care for due diligence. He complimented the team for having designed the document.

Project Launch date.

17. The committee wanted to know a tentative date on which the 50 Channel DTH project can be launched. The Convener DTH committee explained that one activity that is likely to take the longest time for operationalising the project is "establishment of TE's through RFP". The committee that has drafted the RFP has carefully looked into it and decided a timeline of minimum of 180 days on this activity. Therefore the telecast can be only be launched 180 days after the advertisement on this appears in newspaper and provided schedule on other activities does not get disturbed by any unforeseen circumstances. Accordingly, if Ad on this appears by January 15, 2014, the best launch date can only be July 15, 2014. Members were informed that it was previously hoped to launch DTH on January 1, 2014 and then MHRD had gone public, saying the DTH shall be launched on 1st June 2014. At present there has been some delay in publication of tender for establishment of TE's, however, the committee declared '1st July 2014' as the date of launch for 50 MHRD DTH channels. It was further felt that 1st July further benefits, as it also coincides with start of academic session in most of the Institutions in India.
18. Action Taken report was presented and discussed during the meeting. JS [TEL] expressed that most of the actions marked in 9th DTH meeting minutes required to be executed from the Mission have not been initiated yet and the Mission shall now take up each of these items for implementation.
19. It was pointed out that during last meeting, it was resolved that we need to ensure that sufficient bandwidth is made available to carry live content between each of the 150 TE's to NKN/NMEICT POP & then to Earth station for DTH transmission. For this necessary initiative may be taken to write to NKN (NIC) or BSNL to establish such networks, Mr. Kaul is requested to look into this.
20. It was suggested that having looked into the relationship, role & responsibilities of DTH Committee/MHRD, IIT M and TE's and as minuted in the 9th DTH committee meeting, we now need to evolve tripartite MOU out of this document that needs to be executed. The Draft MOU shall be presented in the next DTH committee meeting.

21. JS [TEL] briefed there were some issues pending with Antrix Corporation (a wing of Department of space). To resolve them, a video conferencing was held with the concerned officer of Antrix on December 30, 2013, accordingly an issue of signing MOU with DOS would be settled soon. However an issue on date of payment still persists. We feel payment date should begin from the date MHRD is able to get the NOCC & WPC clearances from MC&IT, while the Antrix insists it from the date of allotment of transponder, i.e., February 1, 2012. The issue is being addressed amicably through correspondences.
22. The committee took agenda item 5 and it was decided IIT M may be asked now onwards to incur all expenses on the conduct of meetings/workshops on DTH programme and it shall make payments to members of DTH committee, Sub-committees, constituted by Chairman DTH committee for attending such meetings. The payment includes TA-DA, Sitting fee & other expenses to Members, including meetings performed by Mr. Pradeep Kaul, Senior Consultant, on the approval of Chairman DTH Committee. The formal approval on this and funds shall be made to IIT M by the NMEICT.
23. Prof. Raghavan pointed out that contrary to popular perception that maximum students are taking Engineering stream, it is the Arts that is taking more than three times the engineering enrolment in India; this is what has been behind the design of allocation of channels for MHRD DTH and discussed during last DTH meeting.
24. A discussion took place, should we on DTH channels beam content after having recorded, viewed, Certified and quality cleared, such as the practice follow in Flip Classes etc., or follow live classes beaming on such channels. The pros and cons of both the methods were discussed & deliberated during the meeting. It was noticed that while most of DTH channels providers (other than News etc.) use pre-recorded programmes and this is perhaps also safe for scheduling etc., however, none of the channel providers face challenges, as are being faced by the MHRD DTH programme in terms of volume and diversity.
25. It was felt, one of the biggest asset of DTH is availability of studio and on-line beaming capability. It was referred that this issue was deliberated in previous DTH committee meetings too, wherein a simple calculation showed that if we assume all the recorded education video content available at HE institutions in the country is digitized, usable and made available to MHRD DTH programme; playback of the whole content on 50 channels cannot exceed beyond 80 days. The MHRD DTH on the other hand will be requiring structured programmes, 9 hours a day per channel, which amount to 450 hours of programmes a day. Assuming we choose to go for recording of programmes; for recording, editing and repackaging of one hour of programme, we normally require 8 to 16 hours. This is a challenging task before us, since we do not have provision to spend $((8-16) \times 9 \times 50)$ 3600-7200 hours a day at our facilities; otherwise for this we may have to setup 4-5 editing units extra at each TE; for which extra funds and related manpower at 153 TE's shall be required.
26. Based on above Prof. Raghavan said based on the understanding that prevails that on MHRD DTH channels, is mostly live teaching, with live interaction, using some of the recorded material from our stocks, may only be the best option. However, Pedagogy & Scheduling Committee is required to deliberate all these issues in detail and its report shall be discussed at the next DTH Committee.

27. Prof Raghavan informed the members that he along with Mr. Kaul had recently visited Space Application Centre, ISRO, where he requested the DECU & SAC engineers to design a universal STB for DTH, which besides receiving free to air channels, has also capability of receiving encrypted signals from other DTH service providers. One model of such STB design may also carry recordings of programmes on pen-drives & then capability of playback of programmes. This is still in idea to drawing board stage but can become a reality soon.
28. Few suggestions were offered by the members: (a) for DTH, it is suggested to use subject Anchor persons, who have already delivered e-content, under NMEICT programme, since they are familiar with delivery of education through ICT, (b) instead calling one hour lecture, we may call it one hour session, (c) students watching DTH programmes, be encouraged to mail their questions and the teacher on screen should respond as many questions live as possible and post answer for the remaining questions on the web, (d) to enable our channels be viewed by more, we may engage cable operators in distributing our channels through their network also. All these suggestions are required to be looked by the Convener, DTH with the help of e-content & Pedagogy Committee.
29. The members were informed that Recurring & Non-recurring budget on DTH was approved by 25th PAB in its meeting held on 6th November 2012. Since the TEEC has now drafted RFP for establishing TE's and includes multicast & unicast of the education content via IP circuits, a need was felt to prepare more realistic Budget for DTH programme till XIIth FY plan end. The budget proposal on this has been prepared and circulated to members present. The DTH Committee, subject to comments/ recommendations received from the members, has approved the Budget. The DTH budget for XIIth Plan shall then be presented to PAB for kind approval. It was also proposed that the PAB might further be requested to allow the DTH Committee to re-appropriate the budget approved within the budget heads. For preparation of the DTH budget, assistance of CEC and IIT M might also be sought.
30. A member proposed that we might involve IGNOU in a major way in the DTH programme. This was welcome by all, since IGNOU has a long experience in similar activities. It was pointed out that a meeting on this with IGNOU, VC representative and VC's of all 13 State Open Universities was held by Chairman, DTH Committee on January 22, 2013. It has therefore been decided to involve IGNOU and some of the State Open Universities in the DTH programme & a number of TE's at such institutes shall be established. However, it seems, the present stand taken by IGNOU is that it is perhaps at present not prepared to take up extra responsibility on account of NMEICT. However, it was felt, if IGNOU desires, it may discuss such issues within and then come up with a proposal in line with MHRD DTH planning.
31. An issue was raised by a members, that Teachers are now required to contribute in a big way and deliver live lecture, offer content etc, after having years of experience and then interact with students and take their questions live, in DTH programme regularly. It was further pointed out that such teachers have also been contributing towards production of e-contents, under NMEICT programme. Therefore we need to encourage and acknowledge talent of such teachers and may equate a number of sessions delivered through DTH etc., as equivalent to paper presented in Nation/international conferences so that the Teacher earns Academic Credit points that may benefit them in API score, etc. It was decided that Pedagogy & Scheduling Committee be also requested to take up this issue and come up

with recommendations. Further the recommendations on this shall be taken up with the UGC, AICTE, IIT & NIT Council etc., for a decision on this issue.

32. Some members enquired if we are providing Electronic Programme Guide (EPG) & FPB and other information to the viewers, as to on what channels, at what time, programmes are going to be telecast on the 50 channels. It was informed that such a facility under EPG programming has already been included in the Teleport RFP and shall be provided to the viewers. This information shall form first page of the MHRD DTH transmission and further web-based information on this shall also be provided. It was recommended the Committee on STB should study FPB (facility to search a particular subject, by topic date, time, slot etc.) issues and come up with a solution and a design so that growth of STB of viewers watching our DTH programmes is not stagnated. It was made clear that we are not attempting VOD through DTH.
33. MHRD DTH Logo design was assigned to a team of Prof. Ravi Poovaiah, IIT Bombay, Prof. Soumyajit Ghoshal, NID Bangalore and Prof. Ravi Mokashi, IIT Guwahati by the 9th DTH Committee. The team has submitted first set of design comprising of 10 logos. The committee viewed each logo design, deliberated on it and Concept No.1, representing channels metaphorically and opening of a book, was felt to be good. Members commented since logo for TV has to occupy small size and logo is superimposed on video backgrounds, its colour, Brightness, etc., need to be carefully relooked that can protrude from such backgrounds. Further TV logo is required to be dynamic, the design team may first be asked to focus only on symbols and words in the first place may be avoided. Some more concepts such as, Countrywide classroom, Shiksha, e-Vidya, beyond book, knowledge outreach, were suggested by the committee for the design team. The comments of the committee be communicated to the design team, further the MHRD DTH objectives etc., may also be discussed with the team for arriving at more suitable design. It was also suggested a request for logo design, through advertisement from general public and institutions may also be sought and best logo be awarded suitably.
34. Mr. Praveen Prakash further briefed that the Secretary, HE in a discussion with Prof. Raghavan and him has desired to launch simultaneous media campaign to build up awareness programme on DTH project, for masses and further the Ministry is of opinion that UNESCO may also be involved in the Media Plan of DTH campaign. The committee looking into advertisement and awareness of DTH may be asked to look into these issues.
35. The committee discussed "Review, Readiness & Timeline for launch of DTH channels" circulated to members as part of agenda background paper. The following decisions on these were taken and it was felt important that in order to achieve the schedule and date of launch, the time line indicated against each of the activity be strictly adhered to. Mr. Kaul to initiate necessary action on each of the following:
 - a) **Selection of 150 TEs:** It is requested that selection of 150 TE's may be taken up by Chairman DTH, JS [TEL] with the Secretary, HE for finalization of about 150-160 Institutes out of the 268 institutes short-listed and recommended by the 9th DTH Committee. Further one or two Lead institutes, within Core Groups A to L may be selected to represent each of such groups to the DTH Roll out Committees. This needs to be achieved by end of January 2014.

- b) **NOC to Broadcast:** A request letter to Prasar Bharti be sent, requesting them to apply for WPC/NOCC/SACFA clearances from Ministry of Communications & IT on behalf of MHRD for running MHRD DTH programme under it. It was recommended the NOCC & WPC approvals to be sought by 15th February 2014.
- c) **MOU with TE Institutions:** A Tripartite MOU be drafted, Approved by 10th February 2014, got signed by the Head's of 150 TE Institutes, Chairman DTH Committee & MHRD on operational responsibilities regarding DTH Programme.
- d) **President of India:** Date to hold a function in consultation with the office of the President of India be finalised. President may be requested to declare MHRD DTH programme to the nation & a signing-in ceremony of MOU by 150 Heads of the TE Institutes be held during the function. The function may preferably be held around 20th February 2014.
- e) **Optical fiber (OF) N/w:** –Expenses on establishing the network from NKN/BSNL be sought and a PO be issued for establishment of Optical Fiber connectivity from (a) 153 TE to nearest POP NMEICT / NKN & (b) NMEICT / NKN Cloud to Teleport End, including a redundancy network. The installation & Testing of OFC at each of the TE be completed by 15th April 2014.
- f) **Report of Sub-committees:** Committees constituted on “e-Content, Logo Design, Pedagogy & Scheduling, STB, Logo Design, Ad's & Awareness programme” to meet and submit its recommendations by 15th February 2014. It was felt Coordination of channel, subjects and expert allocation is very difficult job and needs to be addressed carefully by the Pedagogy committee and it further needs to be monitored even after launch by a group of experts.
- g) **e-Content Workshops:** Workshop on (i) design of Subjects Templates, (ii) selection of tools for: e-Content Development, LMS, Repository development & Content Management, (iii) process & Work Book of e-Content to be developed during Workshop (iv) Subject Co-ordinator & how to train SME, (v) TE Co-ordinator etc., be conducted by 30th May 2014.
- h) **CDN:** BSNL/MTNL/Cloud Server Committee, NMEICT may be engaged to carry out DTH live content via CDN to IP devices across the country, to be viewed at Homes & Institutions. This may be finalised by 15th May 2014.
- i) **Ad's & Awareness programme:** Committee constituted to meet & deliberate. We may also seek assistance from Prasar Bharati to provide wide publicity in all forms of advertisement and Cross Channel publicity on DD Channels, on cost plus basis. Further advertisement material, promos etc may also be got prepared with the help of Prasar Bharati from time to time and with MHRD expenses.
- j) **Viewership & Impact assessment study:** To carry out regular studies to analyze the impact of the DTH program, the Viewership & Impact assessment study may be outsource to a third party. The services of Prasar Bharati may be sought for conduct of audience research, viewership profile etc.

- k) **Monitoring 50 Channels:** it is required to setup Monitoring of 50 Channel Panel and DTH operational Centre at JNU by 15th May 2014.
- l) **Launch of 50 DTH channels:** Dry Rehearsal to be conducted by 15th June 2014. Tentative date of Launch is on 1st July 2014 by Hon'ble President of India, at Vigyan Bhawan.
- m) **JNU Building:** The draft MOU to be finalised by 15.2.14 and shifting of DTH Operations Office to JNU at Temporary Locations be completed by 15th April 2014 & then to its own building & Phase-II operations as per MOU with the JNU.

36. It was suggested that next meeting of the committee might be held on or before 15th February 2014.

The meeting ended with vote of thanks to the Chair.

Pradeep Kaul
Convener, DTH Committee &
Senior Consultant (Tech.) NME-ICT