

Ministry of Human Resource Development
Department of Higher Education

Committee on DTH

The DTH Committee, constituted by the MHRD under NME-ICT project, held its 5th meeting at 12:00 noon, on 14th February, 2012 at the MHRD, Shastri Bhavan New Delhi.

The following members attended the meeting –

1. Prof. S.V. Raghavan, Chairman, DTH Committee, Scientific Secretary, Office of the Principal Scientific Adviser to the Government of India.
2. Mr. N.K. Sinha, Mission Director, NMEICT & Additional Secretary (TEL), MHRD, New Delhi. Member.
3. Prof. Y.N. Singh, Head Dept of Electrical Engineering, IIT Kanpur, Kanpur, Member.
4. Mr. Ravi Saksena, Ex. Head (DCTD/ADCTG/SNAA/SSPG/TAA, Space Application, Centre, Jodhpur Tekra, Ambawadi Vistar P.O, Ahmedabad 380 015, Member.
5. Shri Ravikant, In-Charge Director, EMPC, IGNOU, Maidan Garhi, New Delhi. Member.
6. Mr. A. K Jha, Dy., Director General (Engg.), Directorate General, Doordarshan, Copernicus Marg, New Delhi. Member.
7. Mr. J. M Kharche, Director (Engg.), Directorate General, Doordarshan, Copernicus Marg, New Delhi. Member.
8. Mr. N. V Ramanna, Director (Engg.), Directorate General, Doordarshan, Copernicus Marg, New Delhi. Member.
9. Shri Pradeep Kaul, Sr. Consultant, NMEICT, MHRD, New Delhi, Convener, DTH Committee.

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

1. Prof. Raghavan, Chairman DTH Committee welcomed all the members of the Committee for attending the DTH meeting.
2. Few comments were received from Mr. Sethuraman of DoS, Bangalore, regarding minutes of the fourth DTH Committee, the comments were circulated and noted by the members. The Chairman felt that a letter on this may be sent Chairman, ISRO.
3. Since no more comments were received from any member regarding fourth DTH meeting minutes, the minutes were therefore conformed, unanimously.
4. Prof Raghavan briefed the Committee that Director, Satellite Communication, & Navigation Programme, DoS, ISRO Bangalore has allocated **Frequency Spectrum** for two 36 MHz transponders in INSAT/GSAT-8 to MHRD for NME-ICT programme. Prof Raghavan and the members thanked the DoS for allotting the Frequency Spectrum to MHRD.

5. Prof Raghavan felt that a significant progress has been achieved in the DTH Project of HRD. We have been receiving good support from both the Prasar Bharti engineers and ISRO Management. Besides ensuring the 50 DTH channels take off as soon as possible, we should also focus on content development, since the channel has to be put on 24x7 mode. It should also be ensured that the DTH content should also be available in AAKASH Tablet. It is understood that Virtual Labs experiments, to be conducted on real time are going to be observed on AAKASH Tablet also.
6. Mr. N.K. Sinha, informed the members that in continuation to the communication received from Director, Satellite Communication and Navigation Programmes, Department of Space (DoS), regarding allotment of two transponders, a correspondence from M/s Antrix Corpn., (a Commercial wing of Department of Space) has been received raising an invoice, to MHRD, of Rs. 1,74,64,166/- (including Tax) as lease charges of two Ku Band, 36 MHz Transponders in GSAT-8 satellite for a period from February 1, 2012 to March 31, 2012. The members felt since the rates for lease of transponders have been determined and communicated by the DoS (Govt of India), the rates are reasonable and it was unanimously **recommended that the MHRD should make the required payment to M/s Antrix corpn.**, otherwise we may loose the transponder space.
7. Mr. Sinha further briefed the members that an Agreement from M/s Amtrix Corporation has also been received by the MHRD for signature regarding allocation of two transponders. The Agreement has since been sent for legal opinion.
8. It was observed that during 3rd DTH meeting Mr. Sethuraman from DOS was requested to study and submit a proposal regard 'Study Paper'; how to get 1000 channel spectrum for MHRD, at a single location in space. The members may please be requested to complete the study as early as possible and submit the report to the Chairman DTH Committee.
9. Similarly, Director, DECU, ISRO Ahmedabad was also requested during third DTH meeting to "find the feasibility on design and development of a single DTH set top box that can switch channel from different satellite. The Director may also be requested to do the needful at the earliest.
10. It was felt that for developing Set Top Box for reception of DTH, experts from IIT Delhi, Chennai and Kanpur may be involved in the project. Prof. Y.N. Singh, Member DTH committee, has been requested to initiate necessary action in this issue.
11. Since the MHRD does not have the requisite technical infrastructure and manpower for running the 50 DTH Channels; the DTH Committee during fourth meeting decided to hire the services of a Professional Consultancy Firm (having experience in handling DTH projects) who through tendering process may select a Teleport Agency for uploading MHRD 50 DTH Channels. A discussion took place regarding the procedure being adopted for selecting a Consulting Firm. It was observed that as per GFR Rule, 163 to 177, list of Consulting Firms/PSU's registered with various Ministries of the Government of India were collected. A Request for Proposal (RFP) to at least four agencies working as PSUs under different Ministry of Government of India was sent to such Institutions. An invitation to other agencies was also put up in the SAKSHAT website. Sufficient time was given to these agencies to respond.

12. The committee observed two bid systems was followed in present cases and quotations from M/s. TCIL and BECIL were received in a sealed envelope before the stipulated time. M/s. BECIL is a PSU under Ministry of I&B and M/s. TCIL, a PSU under the Ministry of Communications and Information Technology.
13. No late bid(s) were received or allowed after the specified date and time of receipt. The sealed envelope contained technical bid and commercial bid that were also sealed individually were put before the DTH Committee.
14. The members decided that at present it would be appropriate to select a Consulting Firm, engaging them for only phase-I activity of the DTH. The phase-I shall involve engagement of Govt./PSU's/Private agencies for providing on rental basis a **Teleport facilities** including servers to store content for up linking of up to 50 DTH educational channels through tendering process. The committee further decided that the Phase-II of the tender may not be taken at present, since we need to first finalise on the Real-estate issue, were the DTH Earth Station is to be setup and also we have to finalize on the technical specification of the equipments including the Master Earth Station.
13. The members felt that the outcome or the recommendation of the DTH committee with regard to finalization of Consulting Firm, arising from technical and commercial biddings may kindly be vetted by the audit department of the MHRD or approved by the PAB, before a contract is awarded to the suitable bidder for engagement of Consulting Firm for providing Teleport Agency to uplink 50 MHRD DTH Channels.
14. The members further asked the agencies (who were deputed by their respective authorities) to make Technical presentation before the committee. Both M/s. TCIL and BECIL, therefore made an elaborative technical presentation before the committee members. The committee further asked some relevant question on their experience in undertaking similar projects.
15. The committee members attended the Technical presentation made by M/s. TCIL and BECIL. After this the Technical bids were opened and analysed by the Committee and further based on the Technical presentation, the Members of the DTH committee decided that Technical quotations submitted by both the agencies qualify technically and therefore are suitable for opening the Commercial DTH tender.
16. The members further decided to open the Commercial quotations which were also received in sealed covers from both the Bidders. The Commercial quote submitted by M/s. TCIL for exploring the possibilities through tendering the Govt./PSU's/Private agencies for providing Teleport facilities including servers to store content for up linking of up to 50 MHRD DTH educational channels was found to be Rs. 24 Lakhs (Rupees Twenty Four Lakhs only) inclusive of service taxes as per the prevailing rate. These quotes are "one time and payable as 30% advance along with Letter of Intent and balance on start of DTH channels from Teleport". Similarly, the Commercial quote received from M/s BECIL, "as one time charges for providing consultancy services for selecting DTH Teleport Facilities provider etc., for telecast oh 50 DTH educational channels by NME-ICT" was noted as 12% of the first month's rent and service tax on it.
17. The members observed that the Request for Proposal (RFP) had clearly sought from bidders 'to quote, **one time charges** for providing consultancy services for selecting a

DTH Teleport Service provider etc., (selection of it is required through Tendering process) for telecast of 50 DTH educational Channels by NME-ICT'. However, it was observed that the Commercial quote submitted by M/S. BECIL is not in absolute value. It is observed that Commercial quote submitted by M/s. BECIL is linked to 12% the rent and service tax (on a quote that is likely to be received in future from a Teleport Agency). The committee therefore, felt that the commercial quote submitted by M/s. BECIL is linked with future price and **at present an absolute and exact value of the quote cannot be ascertained**, hence the quote is not clear, not in order, not in correct form and therefore cannot be accepted. The Commercial bid submitted by M/s. TCIL was found to be as one time charges, of Rs. 24 Lakhs (Rupees Twenty Four Lakhs only) inclusive of service taxes as per the prevailing rate. The Commercial quote submitted by M/s TCIL was found to be in order, reasonable and best.

18. The committee therefore recommended that for Phase-I **contract** for 'finding a Teleport Agency for engagement of up-linking 50 DTH channels for MHRD' may therefore **be awarded to M/s. TCIL** in accordance with their quote submitted.
19. Names of the Technical Experts were chosen (amongst DTH committee members), as under, who are requested to prepare and submit (i) Specifications, Scope of Work and Activity requirements of Tender Documents for selecting a Teleport Agency. (ii) Teaching End equipment package that will be needed to generate baseband and educational content for Recording and Live, to be connected through Fiber to Teleport facility. (iii) Physically verify before launch of DTH telecast that the technical specifications and operation parameters of the facilities hired for the purpose, from the Teleport Agency are as per Tender Documents. (iv) Recommend format of the content required at Teaching End and at Tx. chain. (v) Prepare design parameters for setting up the complete Earth Station chain, Servers etc for uplinking 50 and 1000 DTH channels and (vi) Prepare tender documents on SITC basis (supply, installation, testing and commissioning) for setting up of 50 and 1000 Channel DTH facility.
 1. Shri Pradeep Kaul, Sr. Consultant, NMEICT, MHRD & Convener, DTH Committee, Shastri Bhavan, New Delhi 110001.
 2. Mr. Ravi Saksena, Ex. Head (DCTD/ADCTG/SNAA/SSPG/TAA, Space Application, Centre, Jodhpur Tekra, Ambawadi Vistar P.O, Ahmedabad 380 015.
 3. Mr. Yuvraj Bajaj, Additional Director General (Engg.) Directorate General, Doordarshan, Copernicus Marg, New Delhi-110049.
 4. Mr. A. K Jha, Dy., Director General (Engg.), Directorate General, Doordarshan, Copernicus Marg, New Delhi.
 5. Mr. J. M Kharche, Director (Engg.), Directorate General, Doordarshan, Copernicus Marg, New Delhi.
 6. Mr. N. V Ramanna, Director (Engg.), Directorate General, Doordarshan, Copernicus Marg, New Delhi.
 7. Mr. Nageshwar Nath, ME, Consortium for Edu., Commu. New Delhi.
20. It was felt that (i) in order to look into the needs of the contents required for running 50 DTH channels, a meeting of the stake holding institutions, (that are required to be engaged) including utilization of EMRC's all over, for providing recorded or lived DTH Content, may be held at the earliest and such institutions may be assigned with the responsibilities of providing content for DTH channels on regular basis, also (ii) vision continuity of DTH needs to be addressed.

21. The members felt that it should be ensured that VPN fiber optic links are connected from Teleport provider to Institutions to be engaged in providing content on regular basis for DTH transmission. A standby / redundant link may also be made available between the two points.
22. The members further felt, we need to (i) ascertain in what Medium, form and format is the content available at the Institutions (ii) what needs to be done to make it ready for uplink from Teleport Agencies and (iii) if any format conversion of content is required, who is the agency that should be doing it.
23. Similarly it was required that we address the software issues concerning the content that has to be delivered on MHRD DTH Channels, such as (i) the number & titles of subjects selected for DTH Tx, (ii) what should be the duration of a lecture (iii) number of days a subject is expected to be completed, (iv) allocation of Subject Bands in each of the 50 channel, (v) best time to start the first cycle of DTH Tx (vi) design of Time Band for the day for each channel, (vii) to find out if we have sufficient recorded content for each subject to be used for Tx, and (viii) If not, is there a need for Live telecast of such subjects and how to get it done, (ix) Promos, posters and publicity material for launch of DTH Channels.
24. A presentation titled 'DTH Based Interactive Tele-education System' by Mr. Ravi Sexena, Scientist/Engineer, SG (Retd.) SAC/ISRO and member DTH Committee, was made. He introduced that the equipment designed by ISRO, how any existing DTH Uplink facility can be converted to Interactive Teaching end, while TV sets connected through simple STB can continue to receive programmes unaffected and the STB having interactivity can ask live questions through video conferencing and can download the text etc. The cost of the system can be lowered provided sufficient unite are procured. He informed the members that the technology if required by the MHRD can be sought from SAC, ISRO.
25. The members desired that since a number of DTH members are from Space Application Centre (SAC), ISRO, Ahmedabad, if possible, the next DTH meeting may be held at SAC, so that the members can also look at some of the projects undertaken by the ISRO in the field of DTH, Interactive DTH, EduSat etc.

The meeting ended with vote of thanks to the Chair.

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