## Record of Discussion of the Meeting Held on January 18, 2012 On Single test for admission to engineering and science programmes

The meeting was chaired by Shri Kapil Sibal, Hon'ble Minister of Human Resource Development, Government of India. The list of all attendees is enclosed as **Annexure-1**. The note prepared for discussion is enclosed as **Annexure-2**. A copy of the presentation prepared by Professor Sanjay Dhande is placed as **Annexure-3**.

2. Ms. Vibha Puri Das, Secretary (HE), MHRD welcomed the Chairman as well as all members and informed that so far two meetings have been held with a group consisting of Directors of IITs, NITs, IISERs and Dr. Ramasami. By and large, Model-2, as suggested by the Ramasami Committee, was accepted by the academic group. In view of this viewpoint, Professor Sanjay Dhande was requested to prepare a note and a presentation.

3. Professor Dhande made the presentation and the Chairman held an open discussion on all the issues with members present.

- 4. After detailed deliberation, following decisions were taken :
  - All CFTIs will adopt ISEET Indian Science-Engineering Eligibility Test as the entrance examination. The first ISEET examination will be held in April / May 2013. The second ISEET examination will be held in November / December 2013. The third ISEET examination will be held in April / May 2014.
  - ISEET examination will consist of two papers. Examination for both the papers will be conducted on one day. The first part will be from 10 AM to 12 Noon and the second part will be from 2 PM to 5 PM.
  - The first paper MAIN will be a two-hour test. It will be an objective-type test. It will try to test the aptitude of a student for higher education in science-engineering-technical fields. It will test the abilities of comprehension, critical thinking, logical reasoning and similar such abilities.

- The second paper ADVANCE will be a three-hour test. It will be objective-type test. It will try to test the problem-solving capabilities of students in the subjects of Physics, Mathematics and Chemistry.
- The organization of ISEET examination will be the responsibility of CBSE.
  Mr. Vineet Joshi, Chairman, CBSE, will be the lead person. Chairman CBSE shall constitute a group to assist in the organization.
- The academic responsibility including paper-setting, evaluation etc of ISEET examination will be responsibility of CFTIs. Professor Sanjay Dhande, Director, IIT Kanpur, will be the lead person. Prof. Dhande shall constitute an Academic Group to assist in discharging the academic responsibilities involved in conduct of ISEET.
- The coordination with School Boards will be led by Chairman CBSE in cooperation with MHRD and selected Directors of IITs and NITs. The mapping of student scores from School Boards to a virtual common platform is to be worked out in detail with the School boards. The Ramasami Formula needs to be explained. More exhaustive testing of this formula on the data of all School Boards needs to be carried out by April. The modalities of transfer of data from School Boards to ISEET organization should be worked out.
- The schedule of dates for declaration of results of ISEET and School Boards need to be coordinated so that the data is transferred and then a composite score card can be prepared by ISEET indicating the performance of a student in School Board (equivalent level), MAIN and ADVANCE. This would be jointly co-ordinated by Chairman CBSE, Prof. Dhande & JS(TE).
- It was agreed that individual systems such as IITs, NITs, IIITs, IISERs should evolve their specific norms as far as the admission criterion is concerned. However, it was also agreed that the weightage for the performance of School Board should not be less than 40% and can be up

to 100%. The combined weightage for the Main & Advance papers under ISEET shall not exceed 60%.

- Furthermore, IITs, NITs, IIITs, IISERs and other CFTIs will spell out the specific weightages of School Board (equivalent), MAIN and ADVANCE. These systems of CFTIs will also carry out the task of counseling and finally the admission in a coordinated manner. ISEET will have the responsibility of conducting the examination and issuing the composite score card.
- Sample papers for ISEET shall be placed in the public domain from June-July onwards.
- It was agreed that a detailed note shall be prepared based on the decisions / discussions. Once this draft-note is agreed upon then the announcement shall be made by the academic group.
- It was noted that School Boards are positive about the development that the performance of a student is School Board will be given some reasonable weightage in the process of admission.
- It was felt that ISEET examination could be applicable not only to CFTIs but also to other institutions which are under AIEEE as well as to State institutions and institutions deemed to be universities. A dialogue shall be separately opened with States & institutions in Private Sector through MHRD / AICTE.

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5. The meeting ended with a vote of thanks to the Chair.

## List of Participants

Meeting under the Chairmanship of Hon'ble HRM regarding proposed single test for admission to engineering and science programmes held on 18.01.2012 in the Central Secretariat Library, Shastri Bhawan, New Delhi.

SI.No.	Name and Designation
1	Shri Kapil Sibal,
	Hon'ble Minister of Human Resource Development
2	Smt. Vibha Puri Das,
	Secretary,
	Deptt. of Higher Education, MHRD
3	Dr. T. Ramasami,
	Secretary,
	Deptt. of Science & Technology
4	Dr. S.S. Mantha,
	Chairman
	All India Council for Technical Education (AICTE)
5	Shri Vineet Joshi,
	Chairman,
6	Central Board of Secondary Education(CBSE)
6	Prof. R.K. Shevgaonkar,
	Director, Indian Institute of Technology (IIT) Delhi
7	Prof. Gautam Barua,
'	Director.
	Indian Institute of Technology (IIT) Guwahati
8	Prof. S.G. Dhande,
Ŭ	Director,
	Indian Institute of Technology (IIT) Kanpur
9	Prof. Damodar Acharya,
	Director,
	Indian Institute of Technology (IIT) Kharagpur
10	Dr. Sandeep Sancheti,
	Director,
	National Institute of Technology (NIT) Delhi &
	Director (i/c), NIT Karnataka
11	Prof. S.G. Deshmukh,
	Director,
	ABV- Indian Institute of Information Technology & Management
	(IIITM), Gwalior

## Brief note regarding proposed Alternate System for Admission to undergraduate programmes in Science and Engineering

In the meeting of the Council of IITs held on 14<sup>th</sup> September, 2011, Dr. T. Ramasami, Chairman, BoG, IIT, Ropar and Secretary, Department of Science and Technology made a comprehensive presentation on 'Alternative System for Admission' envisaging a single national examination to test for aptitude and advanced domain knowledge or for aptitude alone to supplement the weightage given to performance in class XII<sup>th</sup> examination after normalization of the school scores. For the purpose, Dr. Ramasami placed six Options before the Council and also indicated certain preference(s) of the Committee.

2. The IIT Council, after detailed deliberations, decided that for admission to undergraduate programmes in Science and Engineering weightage be given to the marks obtained by the students in class XII<sup>th</sup> board examinations after scientific statistical normalization of the performance vis-à-vis the average performance of other students appearing in the respective board examination. There was a consensus in the Council that such a judicious mix of school and national level test performance will usher in an alternative admission system wherein multiplicity of tests and dependency on coaching would get reduced in a great measure, aligning the testing process to class XII<sup>th</sup> syllabus. While the Council indicated preference for Option 2 and 6, it decided that the Report, after finalization by Dr. Ramasami, be placed before the CABE and State Education Ministers for a final decision so that the new system could be put in place by the academic session 2013-14.

3. Dr. Ramasami submitted the final report on 21<sup>st</sup> November, 2011 with a request that MHRD may make final selection of the preferred option through a suitable internal mechanism. He also stated that the Ministry may also take appropriate steps to commission a project to ISI to further expand the normalization mechanism for the State Board as also an agency to develop Scholastic Aptitude Test. The Ministry, vide its letter dated 22.11.2011 requested the Director, Indian Statistical Institute, Kolkata to test check the evaluation made for 3-4 years by some other School Boards as well so that the statistical method for normalization of School Board scores being

contemplated for the alternate admission policy could be put to a much greater degree of testing.

4. To consider the Report submitted by Dr. Ramasami Committee and other related issues, a meeting was convened by the Education Secretary on 8.12.2011 wherein apart from Directors of five IITs, Secretary, DST and Chairman, CBSE were present. Initiating the discussion, Dr. Ramasami highlighted the fact that the alternate system for admission worked out by the Committee has potential of emerging as a national testing system, impacting the whole eco-system of higher technical education and may not be confined to IITs alone. He asserted that the Indian Statistical Institute (ISI) has already worked out the methodology for normalization of school board scores and it only needs to eliminate aberrations by expanding the normalization mechanism for the other State Boards which number around 40. There was a consensus in the meeting that change in the existing admission system was imperative. However, concerns were expressed as to how to manage the transition so that there is little resistance and no backlash. While a couple of Directors favoured Option 6 which gave equal weightage of school board performance as subject score and national level aptitude as objective test system. However, the majority view was that such a radical shift may not find favour with the IIT system and it was necessary that besides giving weightage to the school board scores at class 12 level, a national level aptitude test as well as advanced test be conducted (Option 2).

5. In this context, it was felt that if at all the Ministry had to usher in the new system from the year 2013-14, it must quickly lay down the detailed roadmap with critical dates announced well in time. It was felt that an organizational structure for conducting a national level test would also be required to be put in place. One crucial detail identified in this regard was to ensure that the scores from the school boards were obtained in time along with the equivalence scores which could be taken into account for admission. For conducting Aptitude test it was considered equally important to identify a professional testing agency having sufficient experience of aptitude testing. There was, however, no consensus as to what would be the weightage that could be accorded to students' performance at school board examination, performance in an Aptitude examination and that in the Advance aptitude test. According to Ramasami Committee, the performance in the board examination could be given 40% weightage, whereas 30% weightage could be given to each to Aptitude and Advanced test. Another possibility could be that the

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weightage that could be given to each category is left to be decided by the concerned institute. There was general agreement that the new admission system be extended, in the first instance, to IITs, NITs, IIITs, IISERs and other centrally funded technical institutions.

6. Based on the above discussions, Education Secretary requested Prof. Sanjay Dhande, Director, IIT-Kanpur to work out a note laying down the roadmap for implementation of the recommendations of the Ramasami Committee Report. Prof. Sanjay Dhande has since submitted a note on the subject for consideration.

- 7. Following are the main points for deliberation and decision in the meeting:-
  - The year for implementation of the recommendation for holding national level test for admission to centrally funded technical institutions.
  - ii) Organizational structure for conducting the test.
  - iii) Laying down of overall policies, rules, regulations for conduct of examination.
  - iv) Modalities for ensuring that the results of all the States Boards and other examining bodies at +2 level are available by a predetermined date.
  - v) Identification of a professional testing agency for holding Aptitude test and Advance test to assess aptitude depth and scholastic level of a student.
  - vi) The percentage of weightage to be accorded to students' performance at the School Board examination, Aptitude test and Advance test?