

**Project Review and Steering Committee Meeting**

**Minutes of the Review Meeting**

(held at C–DAC, Pune, 30<sup>th</sup> – 31<sup>st</sup> January, 2008)

The Review Meeting for the DOL sponsored Language Application Tools [LAT] & Language Computing Applications [LCA] for Rajbhasha projects was held on 30<sup>th</sup> and 31<sup>st</sup> January 2008. Participants in the meeting are as below:

*Project Review Committee members:*

1. Smt. P.V. Valsala G. Kutty, Joint Secretary, DOL, MHA, GOI (Chairperson)
2. Shri Rakesh Kumar, Director (Technical), DOL, MHA, GOI (Member)
3. Shri Kewal Krishan, Technical Director, NIC, MC&IT, GOI (Member)
4. Shri Vinod K., Assistant Director (Technical), DOL, MHA, GOI (Member)
5. Dr. Hemant Darbari, Program Co–ordinator, C–DAC, Pune (Member Secretary)

*Applied AI Group members, C–DAC, Pune:*

1. Shri Ajai Kumar, Group Co-ordinator
2. Smt. Anuradha Lele, Group Co-ordinator
3. Shri Karimullah Shaik, Team Co-ordinator
4. Dr. Aparupa Dasgupta, Team Co-ordinator
5. Dr. Subrat Kalyan Pattanayak, Team Co-ordinator
6. Smt. Lenali Singh, Project Leader
7. Smt. Priyanka Jain, Project Leader
8. Dr. Sadhana Mourya, Project Leader
9. Shri Dayachand M., Project Leader

*Day 1 Proceedings (30<sup>th</sup> January 2008):*

- 1) Smt. P.V. Valsala G. Kutty, Chairperson welcomed the participants and congratulated C-DAC for the good work and hoped that these efforts would continue. She briefed about the meeting of the Chairmen, Member Secretaries of TOLIC's of 'C' region organized by Corporation Bank and the Department of Official Language held at Mangalore and informed the members that all the software developed for Rajbhasha were highly appreciated by the participants of the meeting. The

participants from banking sector requested to expedite development/adaptation of MANTRA-Rajbhasha translation software for the banking domain.

- 2) The Chairperson informed that the Language Computing Applications (LCA) project has been approved. Now C-DAC, Pune needs to focus on the deliverables under the new scheme and their release on Hindi Diwas, 2008.
- 3) She advised the development team to stick to the agreed time frame for implementing the projects during the 11<sup>th</sup> plan as mentioned in the respective agreements. A brief schedule for deliverables under these schemes for 2007-08 and 2008-09 is enclosed.
- 4) She also advised to complete the important deliverables by the end of July 2008, so that sufficient time is allowed for testing and hosting on the internet by Hindi Diwas, 2008.
- 5) The Chairperson suggested that the MANTRA for education domain should include Corpus of words for both elementary and higher education areas. She detailed that documents of Sarv Shiksha Abhiyan, Adult Education, etc. constitute the major chunk of the documents related to elementary education and higher education domains.
- 6) Dr. Hemant Darbari thanked the Chairperson for the support received from DOL and for sponsoring the development of the envisaged projects for both the 10<sup>th</sup> and 11<sup>th</sup> Plans. He informed about the presentations and discussions held with Prof. Pranab Banerji (IIPA), Chairman of Evaluation Committee for the project “Language Application Tools [LAT] for Rajbhasha” when he visited C-DAC, Pune on 28<sup>th</sup> January 2008 in connection with the evaluation of the project.
- 7) Dr. Hemant Darbari assured the Review Committee that MANTRA-Rajbhasha software would include both Education and Banking domains and would be ready for release by 14th September, 2008. He informed that C-DAC would approach various banks (including Canara Bank, Corporation Bank, Bank of Maharashtra and others) to obtain the corpus and other necessary domain specific information for developing MANTRA-Rajbhasha Translation system for the Banking domain.
- 8) Shri Kewal Krishan apprised the Review Committee regarding certain problem faced while downloading the MySQL Server database software and asked if this software could be provided / bundled along with MANTRA-Rajbhasha software. C-DAC informed the Review Committee that MySQL could not be bundled along with MANTRA-Rajbhasha software since it is developed by a third party and bundling the same would infringe / violate the Copyrights of their software. C-DAC also informed that there was no response for the emails sent earlier to MySQL for getting

My SQL for use with MANTRA. The Chairperson of the Review Committee then advised C-DAC to find an alternative solution for the same and try to contact MySQL again.

- 9) The Chairperson emphasized that Government employees should be made aware of the products and software jointly developed by C-DAC and DOL. She requested C-DAC team to design the training programs to be imparted in two phases. In the initial phase, those who are new to working on computers, would be trained in the basics and in the second phase they would be trained in the use of LILA, MANTRA and SHRUTLEKHAN softwares including its advance features and advantages of switching into these systems. She requested that both the staffs of CTB and CHTI should also be trained to use these softwares. She informed that Director (Technical), DOL would write letters to both CTB and CHTI informing them about the proposed training programs.
- 10) Dr. Hemant Darbari emphasized that to make the MANTRA-Rajbhasha Translation system more effective some of the staff should be allocated to use the system in their day-to-day official work and their feedback be forwarded to C-DAC. This, he said would help C-DAC team to enhance and improve the system periodically. He suggested a period of 2 to 3 months for carrying out the exercise. He even suggested that the teachers of CHTI also be trained to use MANTRA-Rajbhasha Translation system along with LILA-Rajbhasha software. They would, in-turn, be able to train their trainees who could become the actual users of the Translation system. In this direction, C-DAC would be provided with circulars, notifications, orders etc. of Ministry of Home Affairs, so that MANTRA can be customized.
- 11) The Chairperson pointed out that feedback from the Trainees should be collected during or after each scheduled training program. C-DAC presented a feedback letter for MANTRA-Rajbhasha Translation system received from Khadi & Village Industry, Mumbai in which they appreciated its usability and accuracy of translation. It was suggested that such User's feedback copies be furnished to DOL also for the purpose of information and record.
- 12) Discussions were held for the English-Hindi Bilingual Dictionaries and the stand-alone version of Hindi-English Translation System being developed by C-DAC during the year 2007-08 under Language Computing Applications as envisaged in the 11<sup>th</sup> Plan. C-DAC apprised the Review Committee that the developmental work for these projects was progressing well. C-DAC also informed that one version for the stand-alone Hindi-English translation system would be ready for release by September, 2009. Similarly, the work modules, project plan, schedules and their progress for the deliverables for other projects namely Training of the Trainers Program; Online

Examination for Hindi Prabodh, Praveen and Pragya; and the Setting up of the Language Laboratories as proposed under the 11<sup>th</sup> plan were also discussed.

Day 2 Proceedings (31<sup>st</sup> January 2008):

- 1) The Review committee was of the view that since the revision of courseware for Hindi Praveen and Hindi Pragya by CHTI is not yet complete till then it was decided that only LILA Hindi Prabodh (Revised courseware) software for teaching Hindi through the language mediums of Bodo, Kannada, Malayalam, Tamil and Telugu be released in September 2008. The Chairman set February, 2008 and June, 2008 as deadlines for CHTI to make available revised Praveen and Pragya courseware and lessons to C-DAC.
- 2) The Review Committee suggested that C-DAC should prepare LILA software for revised courseware for Praveen and Pragya in respect of 6 – 8 languages mediums (including English, Bangla, Kannada, Malayalam, Tamil and Telugu) by March, 2009, for maximum number of Languages by September, 2009 and remaining after that on priority basis.
- 3) C-DAC informed the Review Committee that the development work for Vachantar-Rajbhasha was progressing well and according to the time schedule. C-DAC explained that the system is being implemented and integrated with the SAPI tools. The Review Committee suggested C-DAC to sort out the issue regarding licenses for Dragon Speaking Software, which is used as a plug-in with the Vachantar-Rajbhasha software.
- 4) The Review Committee requested C-DAC to make available with DOL some (at least 25 copies) signed quotations of Shrutlekhan-Rajbhasha software making it convenient for DOL to distribute them to the prospective customers willing to purchase the software.
- 5) Discussions on Pravachak-Rajbhasha system were held wherein C-DAC informed the Review Committee that the development work for the e-mail reader and e-reader was progressing well. C-DAC informed that it is working on improving the Quality of speech output in the software.
- 6) The Review Committee suggested that both DOL and C-DAC should hold a few meetings with the CHTI members for discussing the development of Trainers of Trainers (TOT) program and the Online Examination for Prabodh, Praveen and Pragya and revision of Pragya lessons.
- 7) It was decided that DOL would approach NIC to avail their training centers to conduct its training programs and to utilize their infrastructure for training of trainers as well as conducting the Online Examinations for Prabodh, Praveen and Pragya.

- 8) The Chairperson informed that she would write to the Banking Division to provide C-DAC with the Bi-lingual corpus, Lexicon, Glossary, Real-time samples, etc which would be used to develop and customize the MANTRA-Rajbhasha Translation System for the banking domain. Similarly, Director (Technical) would write to Ministry of Human Resources Development to co-operate and provide Corpus, Lexican etc. to C-DAC to develop MANTRA for Education domain. C-DAC would in turn follow up these letters to Ministry/Department and get the work done.
- 9) C-DAC enquired if any development work which is required to be carried out to customize the software(s) for any Organization can be charged or not. The Chairperson and the Review Committee informed C-DAC that any further development work or customization of the softwares to meet specific needs of any Organizations could be charged in consultation with DOL to the extent it required additional work on the developed software.
- 10) It was also decided that some two day workshops as were held in June, 2007 and September, 2007 be organized in Department of Official Language through C-DAC for Ministries/ Departments.
- 11) Overall progress of the development of the softwares under “Language Application Tools” was found satisfactory vis-a-viz the deliverables/targets laid down in the agreement signed with the C-DAC for execution of this project.

The meeting ended with thanks to the Chair.

**Annexure**

**Status of deliverables under ‘Hindi Software Development Programme’**

1. Ongoing Scheme “**Language Application Tools**”
- a) Following Softwares targeted to be delivered during 2007-08 have been delivered on 14-09-2007 (Hindi Diwas):
- **LILA**-through Punjabi, Nepali, Kashmiri & Gujarati mediums
  - **MANTRA**- Information Technology & Healthcare Domains
  - **SHRUTLEKHAN** (final)
  - **VACHANTAR** (beta version)

While the following Softwares are under development during 2007-08:

- **LILA**-through Kannada, Malayalam, Tamil and Telugu mediums (Revised Syllabi)
  - **MANTRA**- Education Domain
  - **PRAVACHAK**-Hindi E-mail Reader (beta), Hindi e-Reader (beta)
- b) Softwares to be delivered development during 2008-09 are as under:
- **LILA**-through Kannada, Malayalam, Tamil and Telugu mediums (Revised Syllabi) and Bodo, Hindi mediums.
  - **MANTRA**- General Purpose, Dictionaries of Healthcare and Education and Comprehensive Dictionary (English & Hindi-English) for Official Correspondence.
  - **PRAVACHAK** (final version) -Hindi E-mail Reader (final), Hindi e-Reader (final), Hindi Web Narrator (final)
  - **VACHANTAR** (final version).

2. New Scheme “**Language Computing Applications**”

- a) Development of following softwares to be undertaken during 2007-08:
- Development/Delivery of **Bi-lingual and Bi-directional English/Hindi Pronouncing and Pictorial Dictionaries** for Administrative, Healthcare and Industry domains.
  - Development of Stand alone version of **MANTRA (Hindi to English translation System)**.
- b) Development of following softwares to be undertaken during 2008-09:
- Development/Delivery of **Bi-lingual and Bi-directional English/Hindi Pronouncing and Pictorial Dictionaries** for Administrative, Healthcare and Industry domains.
  - Development of First version of Stand alone version of **MANTRA (Hindi to English translation System)** on text documents for two Ministries.
  - **LILA-online Examination.**
  - **Training of Trainers.**

3. Softwares to be launched on Hindi Diwas Day 2008:

a) **“Language Application Tools”**

- **LILA (Prabodh)**-through Bodo, Kannada, Malayalam, Tamil and Telugu medium.
- **MANTRA**- Education/Banking domain
- **VACHANTAR** (final version)

b) **“Language Computing Applications”**

- **Bi-lingual and Bi-directional English/Hindi Pronouncing and Pictorial Dictionaries** for Administrative, Healthcare and Industry domains

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