No. F. 11-40/DIR/NML/NVLI(TP)/2015-16

Government of India, Ministry of Culture
National Mission on Libraries

Minutes of the third meeting of the Advisory Committee of National Virtual Library of India (NVLI) under National Mission on Libraries (NML) held on 24th February 2016 at 11.00 AM in the Chamber of Secretary (Culture), Shastri Bhawan, New Delhi – 110 001.

Following members were present in the meeting

1.	Shri N. K. Sinha Secretary, Ministry of Culture, GOI, Delhi	**Chairman**
2.	Prof. S. V. Raghavan Department of Computer Science and Engineering, IIT Madras, Chennai	Member
3.	Prof. Deepak B. Phatak Department of CSE, IIT Bombay, Mumbai	Member
4.	Prof. Uma Kanjilal Department of LIS, School of Social Science, IGNOU, Delhi	Member
5.	Prof. Kannan M Moudgalya Dept. of Chemical Engineering, Room No: 311, ITT, Bombay, Powai, Mumbai 400 076	Member
6.	Prof. Mangala Sunder Krishnan Department of Chemistry, IIT Madras, Chennai	Member
7.	Dr. R.S. Mani Senior Technical Director, NKN, NIC, Delhi	Member

Ministry of Culture Officials:
1. Shri K. K. Mittal, Additional Secretary, Ministry of Culture
2. Shri Pankaj Rag, MD, NML Joint Secretary (Libraries), Ministry of Culture
3. Ms. Deepika Pokharna, Director (Libraries), Ministry of Culture

RRRLF Officials:
1. Dr. Arun Kumar Chakraborty, DG, RRRLF and AMD, NML
2. Shri Anirban Biswas, System Manager, RRRLF
3. Shri Soumen Sarkar, Deputy Director (II&M), RRRLF

CDAC Officials:
1. Prof. RajatMoona, Director General, C-DAC
2. Dr. Hemant Darbari, Executive Director, C-DAC, Pune
3. Dr. Dinesh Katre, Associate Director & HOD, C-DAC, Pune
4. Shri Ajai Kumar, Associate Director, AAI Group, CDAC
IIT, Bombay Officials :
1. Dr. P. Sunthar, Associate Professor

Following members/officials could not attend the meeting due to other pre-occupation:

1. Prof. Parthasarathy Mukhopadhyay   Member
   HOD, Department of LIS, University of Kalyani, W.B.

2. Ms. Mahalakshmi Ramakrishnan
   Director (Finance), Ministry of Culture   MoC Official

At the very outset Secretary (Culture) welcomed all the members present in the meeting. Thereafter the following agenda items were taken up for deliberation.

Item 1:   To Confirm the Minutes of the Meeting held on 18th Feb 2016:

Minutes of the 02nd meeting of the Advisory Committee of NVLI held on 18th Feb 2016 were confirmed.

Item 2:   To consider the project proposals for setting up of NVLI, submitted by IIT Bombay, IGNOU/RRRLF, CDAC Pune, NKN, NIC

1) Project Proposals received from the following organisations were discussed:

(a) Proposal for Setting up National Virtual Library of India Jointly with Multiple Organisatios/ Agencies using a Collaborative Approach submitted by Department of CSE, IIT Bombay.

(b) Development of the Portal for National Virtual Library of India (NVLI) with multilingual federated and integrated search & retrieval submitted by CDAC Pune

(c) Indexing of NVLI Digital Collection and Integrated Library Catalogue Database by IGNOU and RRRLF.

(d) A project proposal on setting up of cloud services for the NVLI system submitted by NKN, NIC.

2) Deleberation on the project proposals followed the following two presentations:

(a) Presentation by Dr. Deepak B. Phatak, Deptt. of CSE, IIT Bombay on setting up of NVLI jointly with other three organisations.

(b) Presentation by CDAC Pune onDevelopment of the Portal for NVLI with multilingual federated and integrated search & retrieval.

3) After due deliberation on the project proposals submitted before the committee in the meeting the following decisions were taken:

(i) The Committee noted that the Scope of the project has changed considerably vis-à-vis the original concept note on the basis of which E.O.I/RFQ was published as part global tendering process.

(ii) The Committee observed that NVLI would be an evolving system. In addition to about forty activities/services (bubbles/facets) already identified there should be flexibility in the system for addition of many more activities/services (bubbles/facets) in future even during the project period. Thus, it is not possible to develop NVLI System through a Private Vendor selected through a tendering process, since in such a scenario the activities/services has to be freezed at the time of awarding the contract.

(iii) It is not a simple IT project, but a platform with digital contents, a Virtual Learning environment and an E-Governance platform facilitating data analytics, multilingual federated searching and retrieval. It is more than Google as it would also retrieve content and locate the host institution(s). It would also facilitate searching & retrieval of contents/resources available in various open source repositories other than NVLI.

(iv) It was observed that NVLI System has to be developed and implemented in Action Research Mode, where experiences are to be learnt during various phases of the development and would facilitate R&D efforts for problem solving.

(v) Modification of any magnitude may be required to be made within the budgetary provision and efforts have to be made to achieve more within the estimated budget/cost. The fund will be released as Grant-in-Aid. There is no scope of profit or loss and **Government organisations involved in the process will have to follow the provision of GFR.** Utilisation Certificate for the grants used has to be submitted and unutilised grants, if any, have to be refunded to the Government of India.

(vi) There should be provision for Crowdsourcing and recording of user comments/suggestions. Developers should try to incorporate the suggestions.

(vii) Some deliverables should be made visible as quickly as possible so as to give credence and support to the project.

(viii) The Project design should guarantee the reusability and portability to new technologies. It is not necessary to develop all the activities/services using the same technology; however there should be proper synchronisation and integration among the modules / services.

(ix) A Project Management Group from MoC will monitor the activities of the NVLI development and Implementation. Project Management dashboard will show the status of the project on real time.

(x) Intensive Training will be arranged at various levels for project management, monitoring, activity planning, content uploading and content management by IIT, Bombay.

(xi) NVLI will adopt suitable international standards for the Metadata and Digitised contents. NVLI will have an appropriate data policy. Data conversion tools have to be developed under the NVLI project for conversion of existing data to the standard adopted by the NVLI and also migration of data from the existing system of the holding organisations to the Centralised NVLI system.

(xii) All the organisation involved in the development of the NVLI system namely, Ministry of Culture, IIT Mumbai, CDAC Pune, IGNOU, RRRLF and other organisations/ Agencies, will jointly hold the IPR. It should not be a problem as all the organisations collaborating in the project are government organisations.

(xiii) Open source software should be used and the software developed under the NVLI system cannot be used for commercial purposes. Any private organisation / agency can join and contribute to the project. However, they would not be allowed to download any portion of the software for using it commercially.

(xiv) Annual fund requirement has to be specified by IIT Mumbai in consultation with all the collaborating organisations. IIT, Bombay will clearly identify/specify the Activity areas, Bubbles and Services to be covered by each of the collaborating organisations in consultation with the said organisations so as to avoid any complications at a future date. IIT, Bombay would also ensure uniformity in design of the end user interfaces.

(xv) The project in terms of the specified scope has to be completed and transition to support within three (03) years from the date of award of the project. Physical milestones to be achieved have to be shown as physical targets for every six months period. IIT, Bombay will submit Project Status Report on monthly basis.

(xvi) Ministry of Culture will take appropriate steps for continuation of the project **beyond 31st March 2017** as the project has been approved for the 13th plan period as mentioned in para 1, so as to ensure uninterrupted flow of fund throughout duration of the project for the project period.

(xvii) MoC will identify a group / organisation to receive the transition of the project to support the go-forward sustainment and management on completion of project, which will start at least 06 months prior to the completion.

(xviii) IIT, Bombay will be responsible for Project Management and resource allocation for all identified partners. IIT, Bombay will be the single point of contract for Ministry of Culture in terms of project delivery, accounting processes / utilization of resources.

IIT Bombay will also be responsible for the following within the first two months:
- Finalise SRS
- Project Development plan and Project schedule with milestones
- Create work break down structure and define activities/ sub-activities
- Estimate cost and prepare budget
- Plan Quality and Risk Management

- Start imparting training of the project management tool.
- Plan procurement / creation of infrastructure (Mini-Cloud etc.)

(xix) IIT will finalise the System Architecture within three months. IIT, Bombay will be responsible for the module Virtual Learning Hub in the form of MOOC. IIT, Bombay will also be responsible for preparation of project documentation. IIT, Bombay will develop a customized DRUPAL which could be downloaded and installed in local server for populating Data/Content offline by the participating organizations. These data then would be ingested into the Centralised server of NVLI through a synchronized pooling mechanism of NVLI system. All participating organisations will be necessary training for the said operational mechanism. IIT, Bombay will ensure systems integration, testing and quality assurance.

(xx) IGNOU and RRRLF will be responsible for Indexing of NVLI Digital Collection and development of Integrated Library Catalogue Database.

(xxi) CDAC would be responsible for development of most of the modules. Any overlap between CDAC and IGNOU would be eliminated. CDAC will start developing two modules, one which they are already familiar with and the another using IIT, Bombay methodology/technology. CDAC agreed to develop tools and services for Virtual Walkthrough Container and uploading of at least one demo content. CDAC will also develop the Augmented Reality Platform.

(xxii) NKN will be responsible for necessary Cloud infrastructure and networking of libraries. NKN would initially arrange two peta byte (2-PB) of storage, which will be extended dynamically depending on the requirements.

(xxiii) Two Mini Cloud platforms will be created at CDAC and IIT, Bombay respectively as initial development platform for the project.

(xxiv) A Beta version should be made within eight months and the first user version should be ready by one year six months. Secretary (Culture) requested that efforts may be made to make a few easily implementable modules ready by 15th August, 2016.

(xxv) All the organisations agreed to use JIRA project management tool. IIT, Bombay will arrange necessary training on JIRA platform.

(xxvi). The committee also noted that content collection/ creation for NVLI is a gigantic task and it should be taken up separately as it requires agreement/MoU with various partnering institutions and resolving of issues e.g. copyright/ IPR , free access/charge based etc. MoC will take appropriate steps for contribution/uploading of data from various partnering organisations/ institutions.

4) Total budgetary estimates for the project are mentioned below:

Total budgetary estimates for developing NVLI System :

(Rs. In lakhs)

Organization / Year	Year 1	Year 2	Year 3	Total
IIT Bombay	1138.42	606.84	610.82	2356.08
CDAC, Pune	945.26	613.37	557.18	2115.81
IGNOU / RRRLF	396.96	293.84	322.20	1013.00
NIC / NKN	130.00	1380.00	240.00	1750.00
Total	2610.64	2894.05	1730.20	7234.89

Details of the man power component for the project budget for NVLI Man power estimate for all Institutions

(Rs in lakhs)

Organization / Year	Year 1	Year 2	Year 3	Total
IIT Bombay	404.88	433.20	461.52	1299.60
IGNOU and RRRLF	171.90	226.56	250.44	648.90
CDAC	398.94	479.67	430.81	1309.42
NIC/NKN	130.00	240.00	240.00	610.00
Total	1105.72	1379.43	1382.77	3867.92

5) The projects proposals were approved in principle and IIT Bombay was entrusted as the Principal Investigator (PI) of the project with other organisations being entrusted as co PIs, subject to fulfilling of the adherence to the observations made above under Item 2 (3).

6) The Advisory Committee approved the project at an estimated cost of **Rs.7234.89 lakhs** and decided that the project may be entrusted to IIT, Bombay with multi institutional / organisations mode. Necessary sanction may be accorded in favour of Computer Science and Engineering Department, IIT, Bombay as Grant-in-Aid keeping in view the availability of fund under the said budget head for undertaking the project immediately.

7) An initial amount of Rs. 750 lakhs may be transferred to RRRLF, Kolkata as Raja Rammohun Roy Library Foundation (RRRLF), an autonomous body under the Ministry of Culture is the nodal agency for the NML for administrative, logistic, planning and budgeting purposes (vide MoC notification **No. 18-4/2009-Lib (Pt.)**). MoC will issue Sanction Order/ Work Order in favour of the IIT, Bombay. After acceptance of the Sanction order/ Signing of MoU with MoC by the IIT, Bombay and Other Partnering Organisations, RRRLF will disburse the fund to IIT, Bombay/ Other partnering institutions with prior approval of the MoC.

8) In case of any dispute arising out of the operation or in the collaboration arrangement, decision of the Advisory Committee for resolving the issues would be binding to all.

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

(Pankaj Rag)
Mission Director(NML)