

F. No.16-8/2017-TEL Government of India Ministry of Human Resource Development Department of Higher Education

Date: 13th December, 2017

Subject: SFC Memorandum for continuation of the Project e-Shodh Sindhu (eSS) Phase-II.

1. Scheme Outline

- 1.1 Title of the Scheme.e-Shodh Sindhu: Consortium for Higher Education Electronic Resources.
- 1.2 Sponsoring Agency (Ministry/Department).
 Department of Higher Education, Ministry of Human Resource Development.
- 1.3 Total Cost of the proposed Scheme. Rs. 492.08 Crores.
- 1.4 Proposed duration of the Scheme.
 FY: 2017-18 to 2019-2020; Subscription Year: 2018 to 2020.
- **1.5 Nature of the Scheme.** Central Sector Scheme.
- 1.6 For Central Sector Schemes, sub-schemes/components, if any, may be mentioned. For Centrally Sponsored Schemes, central and state components, if any, may be mentioned:

 This is a Central Sector scheme for aggregating the electronic journals being subscribed by various higher educational institutions and collective bargaining of prices.
- Whether a New or a Continuing Scheme? In case of a Continuing Scheme, whether the old scheme was evaluated and what were the main findings? The eSS was sanctioned on 2nd June 2015 for Rs. 483.34 Cr for a period of two years. The scheme concluded on 31st March 2017. A third party evaluation has been done

by NASSCOM, which found significant positive impact on higher education and recommended continuation. Recommendations are placed at **Annexure I.**

1.8 Whether in-principle approval is required?

It is a proposal for continuation of the project. Not Applicable

1.9 Whether a Concept Paper or a Detailed Paper has been prepared and stakeholders consulted? In case of new Centrally Sponsored Schemes, whether the State Governments have been consulted?

The project is based on the recommendations of the third party evaluation which has given a roadmap for future implementation.

Based on the utilization of the resources provided by eSS by the participating institutions, it was felt that a modification of the system was needed. Under the proposed dispensation, the eSS would primarily work as a mechanism for joint negotiation of the price of the journals.

Changes made in the scheme

- 1. Instead of the eSS (INFLIBET) deciding which resources will be subscribed for which institutions, a web portal was created for the institutions to specify their specific requirements.
- 2. Unlike in the past (institutions have to apply to INFLIBNET for membership in eSS), all institutions have been allowed to enter and give their requirement. As such, this system is more democratic.
- 3. The web survey of the basic requirements became the basis for the collation of the requirements.
- 4. The cost of the journals is to be paid by the institutions themselves. This was done to bring discipline in the institutions while opting for various electronic journals.
- 5. The INFLIBNET would undertake negotiations on behalf of all the participating institutions.
- 6. Institutions would be barred from paying any publisher a rate more than what has been negotiated under the eSS. A certificate would be given by the Finance Dept of the centrally funded institutions to this effect.
- 7. An exception has been made for meeting the cost of the 'National Resources' (resources needed by $1/3^{rd}$ of all institutions) for the Centrally funded and State-funded institutions.

- 1.10 Which existing schemes/sub-schemes are being dropped, merged or rationalized?
 Not applicable.
- 1.11 Is there an overlap with an existing scheme/sub-scheme? If so, how duplication of effort and wastage of resources are being avoided?

 No.
- 1.12 In case of an umbrella scheme (program) give the details of schemes and subschemes under it along with the proposed outlay component-wise.
 Not applicable.

2. Outcomes and Deliverables

- 2.1 Stated aims and objectives of the Scheme
 - a) To reap benefits of collective bargaining for the electronic journals and databases being subscribed by the libraries of higher educational institutions
 - b) To arrive at the best price for each of the bouquet of the journals
 - c) To establish direct correlation between the use of a journal and the payment for the same, so that there is no wastage of money at any level
 - d) To provide for 'National Resources', which are resources needed by most of the participating institutions through a central contribution.
- 2.2 Indicate year-wise outputs/deliverables in a tabular form.

Table: 1: Year-wise Outputs

In crores

| Item | 2017-18 | 2018-19* | 2019-20* | Total |
|---|---------|----------|------------|--------|
| National resources | 117.82 | 117.82 | 117.82 | |
| = • | | | | 353.47 |
| World E Library resources & South Asian Archives | 25.00 | 25.00 | 0 | 50.00 |
| NLIST | 8 | 8 | 8 | 24.00 |
| Backlog to Elsevier | 8 | 0 | 0 | 8.00 |
| Total | 158.82 | 150.82 | 125.82 | |
| | | | ta e de la | 435.47 |
| Admin @1 % | 1.59 | 1.51 | 1.26 | 4.35 |
| GST @ 12% | 19.06 | 18.10 | 15.09 | 52.26 |
| Grand total | 179.47 | 170.43 | 142.17 | |
| | | | | 492.08 |

Comments: Provision may have to be made for annual increase in cost (3 to 5%) every year, i.e. Rs. 121.35 crores for 2018 – 19 and 124.99 crores for 2019-2020). Moreover, there may also be fluctuation in foreign currency exchange rates. This may be taken up in supplementary budget.

2.3 Indicate Outcomes of the Scheme in the form of measurable indicators which can be used to evaluate the proposal periodically. Baseline data or survey against which such outcomes should be benchmarked should also be mentioned.

** Outcomes

| | | Num | No. of | Number of institutions | | |
|------|--|-----------|--------|------------------------|--------------|--------|
| S No | Resource Collection Name | ber of | Inst. | Centrally funded | State funded | Others |
| 1. | JSTOR | 3000 | 237 | 100 | 101 | 36 |
| 2. | Economic & Political Weekly | 1 | 206 | 85 | 101 | 20 |
| 3. | JGate Plus (JCCC) | 1 | 184 | 81 | 100 | 3 |
| 4. | Nature | 1 | 166 | 78 | 64 | 24 |
| 5. | Oxford University Press | 262 | 159 | 79 | 69 | 11 |
| 6. | ASME Journals Online | 29 | 157 | 85 | 19 | 53 |
| 7. | Springer Link | 1700 | 154 | 49 | 98 | 7 |
| 8. | ASCE Journals Online | 36 | 146 | 76 | 15 | 55 |
| 9. | ACM Digital Library | 140 | 145 | 75 | 21 | 49 |
| 10 | American Institute of Physics - | 19 | 138 | 56 | 68 | 14 |
| 11 | American Physical Society - | 13 | 135 | 61 | 63 | 11 |
| 12 | Taylor and Francis eSS | 1076 | 129 | 34 | 87 | 8 |
| | Institute for Studies in Industrial Development (ISID) | | 128 | | | |
| 13 | Database | 1 | | 56 | 71 | 1 |
| 14 | American Chemical Society - | 49 | 124 | 32 | 77 | 15 |
| 15 | Web of Science | 1 | 120 | 38 | 69 | 13 |
| 16 | Wiley Blackwell Publishing eSS | 908 | 119 | 35 | 72 | 12 |
| 17 | Annual Reviews - eSS | 43 | 114 | 26 | 11 | 77 |
| 18 | Project Muse | 670 | 103 | 46 | 51 | 6 |
| 19 | Royal Society of Chemistry eSS | 29 | 103 | 26 | 69 | 8 |
| 20 | MathSciNet | 1 | 100 | 53 | 33 | 14 |
| | | 7980 | | | | |

2.4 Indicate other schemes/sub-schemes being undertaken by Ministries/Departments which have significant outcome overlap with the proposed scheme. What convergence framework have been evolved to consolidate outcomes and save public resources?

All the consortia subscribing for the electronic journals have been brought together on one platform for negotiating better rates.

3. Target Beneficiaries

3.1 If the scheme is specific to any location, area and segment of population, please give the details and details and basis for selection.

The scheme will benefit (360) institutions which are into research, and 2,600 colleges by providing access to more than 32 lakh digital books and about 7,600 electronic journals.

3.2 Please bring out specific interventions directed in favour of social groups, namely SC, ST, differently abled, minorities and other vulnerable groups.

This scheme will benefit all groups and sections of the society.

3.3 If the scheme has any gender balance aspects or components specifically directed at welfare of women, please bring them out clearly?

This scheme is gender neutral.

3.3 Please bring out special interventions, if any, in North East, Himalayan, LWE, Island territories and other backward areas.

The scheme will benefit the areas since it provides access to knowledge resources using the net connectivity.

3.4 In case of beneficiary oriented schemes, indicate the mechanism for identification of target beneficiaries and the linkage with Aadhaar/UID numbers.

Not Applicable

3.5 Wherever possible, the mode of delivery should involve the Panchayati Raj Institutions and Urban Local Bodies. Where this is intended, the preparedness and ability of the local bodies for executing the proposal may also be examined.

Not Applicable

4. Cost Analysis

4.1 Cost estimates for the scheme duration: both year-wise component-wise segregated into non-recurring and recurring expenses.

| Item | 2017-18 | 2018-19* | 2019- 20* | Total |
|--|---------|----------|--------------|--------|
| National resources | 117.82 | 117.82 | 117.82 | 353.47 |
| World E Library resources & South Asian Archives | 25.00 | 25.00 | 0 | 50.00 |
| NLIST | 8 | 8 | 8 | 24.00 |
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| Admin @1 % | 1.59 | 1.51 | 1.26 | 4.35 |
| GST @ 12% | 19.06 | 18.10 | 15.09 | 52.26 |
| Grand total | 179.47 | 170.43 | 142.17 | 492.08 |

The entire expenditure is recurring.

4.2 The basis of these cost estimates along with the reference dates for normative costing.

The cost estimates are prepared in the following manner:

- a) All institutions are asked to enter into a web portal and list down all resources which are required by them, depending on the research being done in the institution. They were told that they have to pay the cost of these journals and therefore shall be responsible while listing the resources.
- b) After the one month period, 360 institutions have entered their requirements.
- c) These requirements were analysed and resources which are generally needed by at least 100 or above institutions and which are not subject-specific are identified as 'National Resources'.
- d) The cost of acquiring these 'most important' journals as far as Govt funded institutions has been estimated and included in the proposed scheme. All other institutions would meet this cost also from their own resources (they will only get negotiated rates).
- e) The subscription for the World E Book Library and South Asian Archives, which provide access to more than 32 lakh digital books and archives was continued during the period. The dues payable to the existing resources have also been added. The institutes does not have to make any payment for accessing these resources.

- f) In eSS under NLIST access is provided to 6000+ journals and 1,25,000 books to 3000 colleges covered under Sec 12(B) and 2(f) of UGC, Act. The colleges contribute Rs.5000/- annually
- g) The cost of administration of the web portal, the negotiations cost and other admin expenses have been added in the scheme cost @ 1% of the total cost.
- h) The GST rate @ 12% has been added in the scheme cost.
- 4.3 In case the land is to be acquired, the details of cost of land and cost of rehabilitation/resettlement, if any.

Not Applicable

4.4 In case pre-investment activities or pilot studies are being carried out, how much has been spent on these?

Not applicable

4.5 In case the scheme involves payout of subsidy, the year wise and component wise expected outgo may be indicated.

Not Applicable

In case committed liabilities are created, who will or has agreed to bear the legacy burden? In case assets are created, arrangements for their maintenance and upkeep?

Not Applicable

5. Scheme Financing

5.1 Indicate the sources of finance for the Scheme: budgetary support, extrabudgetary sources, external aid, state share, etc.

Funding has been limited to only Govt funded institutions, that too for the 'National Resources'. All other resources are to be funded by the institutions from their own funds.

5.2 If external sources are interned, the sponsoring agency may indicate, as also whether such funds have been tied up?

Not Applicable

5.3 Indicate the component of the costs that will be shared by the State Governments, local bodies, user beneficiaries or private parties?

Not applicable

6. Approvals and Clearances

Requirement of mandatory approvals and clearances from various local, state and national bodies and their availability may be indicated in a tabular form (Land acquisition, environment, forestry, wildlife etc.)

Not Applicable

7. Human Resources

7.1 Indicate the administrative structure for implementing the Scheme. Usually creation of new structures, entities etc. should be avoided.

The INFLIBNET, which has already set up a Project Management Unit will continue to implement the scheme. There is no additional fund required.

Manpower requirement, if any. In case posts, permanent or temporary, are intended to be created, a separate proposal may be sent on file to Pers. Division of Department of Expenditure (such proposals may be sent only after the main proposal is recommended by the appraisal body)

No additional posts are sought

7.3 In case outsourcing of services or hiring of consultants is intended, brief details of the same may be provided.

The current arrangement of Project Management would be continued.

8. Monitoring and Evaluation

8.1 Please indicate the monitoring framework for the Scheme and the arrangements for statutory and social audit (if any).

The projects in the scheme would be monitored by the PMU. The overall scheme would be monitored by the Mission Director.

Please indicate the arrangement for third party/independent evaluation? Please note the evaluation is necessary for extension of scheme form one period to another.

The third party evaluation would be conducted during the last quarter of the scheme.

 Comments of the Financial Advisor, NITI Aayog, Department of Expenditure and other Ministries/Departments may be summarized in tabular form along with how they are being internalized and used to improve this proposal.

(Comments will be added)

10. Approval sought:

Approval of the SFC is sought for Rs. 492.08 crores for implementing the eShodh Sindhu – the project that would provide access to the digital learning resources to higher educational institutions as per the details mentioned above. All disbursements and monitoring of funds would be done through the EAT module of PFMS.

(R. Subrahmanyam)
Special Secretary to the Government of India
Tel No.-23383202

4.6.2. E-Shodh Sindhu (ESS) Project

Based on the recommendation of an MHRD committee, merging the three consortia initiatives, UGC-INFONET Digital Library Consortium, NLIST and INDEST-AICTE, the E-Shodh Sindhu (ESS) project came into existence. The Consortium subscribes to electronic resources covering all major subject discipline being taught in CFTIs, universities and colleges. It includes a wide variety of materials including e-journals, bibliographies, factual databases, reviews published by scholarly societies, university presses, institutions, commercial publishers and aggregators. The INFLIBNET (Information and Library Network) Centre has been entrusted with establishing communication services through information access and transfer, to provide support to scholarship learning, research and academic pursuits. This requires close cooperation and involvement of agencies concerned. The INFLIBNET Centre is also entrusted with developing and deploying appropriate software tools and techniques for authenticating authorized users through a computer communication network linking libraries and information centers in universities, colleges, UGC information centers, and other institutions of national importance. The E-Shodh Sindhu (ESS) initiative thus aims to provide access to qualitative electronic resources at lower subscription rates.

File No. F.No.16-23/2014-TEL 5 File No-2-10/2008-DL

Brief Background of the Project

The E-Shodh Sindhu (ESS) is created to provide current as well as archival access to core and peer-reviewed journals and a number of bibliographies, citation and factual databases in different disciplines from a large number of publishers and aggregators.

The main aim of the project is to create a Consortia for Higher Education e-Resources and to provide access to qualitative electronic resources including full-text, bibliographies and factual databases to its member institutions which includes centrally-funded technical institutions (CFTIs), universities and colleges that are covered under 12(B) and 2(f) Sections of the UGC Act. At present there are 87 CFTIs, 230 Universities, 94 Technical Institutes and 3000+ Colleges registered under the ESS Consortium.

Project commenced on : December 1, 2015

Evaluation Comments

Effectiveness: E-Shodh Sindhu (ESS) promotes the usage of e-resources and access to information regarding serials, thesis/dissertation, books, and non-book materials by identifying the source irrespective of location and distance. The initiative plays a major role in promoting scholarly communication among academicians and researchers in India and has benefited learners, researchers and faculty community. Consortium covers all the disciplines viz. Pure Sciences, Engineering and Technology, Social Sciences and Humanities including Management and Languages.

Efficiency: The consortium is efficiently managed through an administrative structure

- 1. National Advisory Committee
- Negotiation Committee
- 3. Steering Committee and
- 4. Resource Selection Committee

The Consortium has developed an online interface for creation, update and modification of valid users of the member institutions. It co-ordinates with its member institutions and publishers for smooth access to e-resources and liaises to address and resolve problems and popped up issues.

Sustainability: E-Shodh Sindhu (ESS) has established the framework and foundation of a system that can be sustained, nurtured and scaled up quickly. Initiatives like fixed and discounted rates for subscription and Associate Membership Programme to retain existing members and include non- members have been introduced. The project is observed to have made a remarkable progress in all aspects, however, for the project to move forward and fulfill its final and broader objectives it is essential to have a combination of continued financial sponsorship, focus more on key growth areas and encourage seamless working relation and communication across stakeholders, contributors, support personnel, external agencies and individuals.

| I Details | Name: Dr Jagdish Arora Email Id: director@inflibnet.ac.in Mobile: 9725051200 | Available | |
|--|--|---|--|
| Objectives | Deliverables | Evaluation | |
| Setting-up e Shodh Sindhu (ESS): Consortia for Higher Education e-Resources. Develop a formidable collection of e-journals, e-journal archives and e-books on perpetual access basis. Monitor and promote usage of e-resources in member universities, colleges and technical institutions in India and bridge the digital divide through awareness and training programmes. Provide access to subscription-based scholarly information (e-books and e-journals) to all educational institutions and scholarly content available in open access through subject portals and subject gateways. Provide access to selected e-resources to additional institutions including open universities and non-member MHRD- funded institutions. Move towards developing a National Electronic Library with electronic journals and electronic books as its major building blocks. | Identification of existing and prospective beneficiary institutions. Selection of e-resources for beneficiary institutions. Access of e-resources to beneficiary institutions. Negotiation of rates of subscription for selected e-resources. Remittances of subscription fee to the publishers/their agents. Reaching out to private /self-supported colleges and universities. Usage harvesting, monitoring and trend Analysis. Maintain and update consortium website Monitoring of usage of e-Resources. Providing off-campus access to e-Resources. Creation of archive for subscribed content. | Objective has been met. Sources: PI Survey, MHRD Project Lead, Interview with PI | |
| Funds Sanctioned (INR) | Funds Released (INR) | UCS | |
| 484.34 Cr. for 2015-2017 | 1st Installment: 168 Cr. in 2015-2016 2nd Installment: 235 Cr. in 2016-2017 3rd Installment: 60 Cr. in 2017-2018 | INFLIBNET Cent confirms UC's were submitted | |
| Total : 484.34 Cr. | Total : 463.00 Cr. | INDEST Inflibne INR 95 Cr. sanc- tioned: INR 20 Cr P224-338) 3r PAB). Variation found fund sanctioned and fund receiv | |

Outcome

- The e Shodh Sindhu (ESS) proj- | Status: Closed/ ect has achieved the following Open/Incomoutcomes:15000+ e-Journals, 3135000+ e-Books, 40 Resources and 16 Databases are currently available to its member institutions.
- 2. Upgraded Access to IEEE journals: For all NITs and IITs (34 institutions).
- 3. Table of Contents (TOC) For 45,221 e-journals.
- 4. E-Shodh Sindhu (ESS) have further integrated additional features to facilitate seamless access to e-resources such as:
 - · The INFLIBNET Access Management Federation (INFED) -Shibboleth Authentication and authorization of users.
 - InfiStats COUNTER & SHUSHI - Data Service usages compliance.
 - JGatePlus for Document Delivery Service (DDS), Meta Harvesting and Discovery Services (DS).
- 5. Awards and Recognition
 - Jury Choice Award e-INDIA 2010 for project "National Library and Information Services Infrastructure for Scholarly Content (N-LIST)".
 - Manthan South Asia 2010 for project "National Library and Information Services Infrastructure for Scholarly Content (N-LIST)"
 - Skoch Digital Inclusion Award 2011 for the project "Technology in Education"

plete/ ongoing

Summary

E-Shodh Sindhu (ESS) has evolved in modernizing university libraries through a nation-wide data network for optimum utilization of information and knowledge sharing. The magnitude of user and usage statistics confirms the popularity and significance among scholars, researchers and teachers. Single Sign-on (SSO) platforms of EzProxy and Shibboleth provide seamless access to e-resources. With an existing wide-ranging searchable database of quality material, the outreach is poised to multiply.

The project so far has been successful in delivering its objective. Along with the many positives, it has been observed that many journals and editions are mostly concentrated on social development, science-related resources as such that scholars and researchers from other streams found it not very useful or of very little help while looking for contents of their particular subject.

Sources: PI Survey, MHRD - Project Lead, Interview with PI

Way Forward

As a way forward, the project should take into consideration the points, findings and roadblocks that have been encountered during the course of the project. Some of them are mentioned below:

- INFLIBNET should focus to inculcate the habit of library consultancy across the institutions and encourage teachers and scholars to shun dependence on lecture and note based learning alone.
- INFLIBNET is required to scale up its infrastructure, bandwidth to meet with multiple user congestion in the network traffic and delays in access which may cost time and energy for a user.
- Continue to train and develop human resources in the field of computerized library operations and networking to establish, manage and sustain INFLIBNET.
- 4. Continue to educate Non-Users (Training, workshops, audio visuals, demonstrations etc.) so as to convert them into users and increase on giving continuous support and assistance to the registered users, inform and educate about new technological features and changes.
- 5. Steps should be taken to digitize more Indian journals and uploaded to e-resources portal and to develop new methods and techniques for archival of valuable information available as manuscripts and information documents in difference Indian languages, in the form of digital images.
- 6. Efforts should be made to include journals from other streams to make it available for individuals from other streams, researchers and scholars too:
- 7. Recommended for continuation