GUIDELINES FOR e-CONTENT DEVELOPMENT OF PROJECT, SUBMISSION FOR ASSISTANCE FROM UGC UNDER NME-ICT

University Grants Commission
Bahadur Sha Zafar Marg,
NEW DELHI – 110 002
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“e-PG Pathshala”

A Project under
National Mission on Education through ICT (NME-ICT)

1. PREAMBLE

The National Mission on Education through Information and Communication Technology (NME-ICT) is envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions at any time any where mode. Its motto being “to provide connectivity up to the last mile”, the NME-ICT aims to extend computer infrastructure and connectivity to over 32000 colleges existing at present and each of the departments of over existing 550 universities/deemed universities and institutions of national importance in the country. The numbers of institutions/Departments are is grow in future.

NME-ICT seeks to bridge the digital divide, i.e., the gap in the skills to use computing devices for the purpose of teaching and learning among urban and rural teachers/learners in higher education domain and empower those, who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This will enable them to make best use of ICT framework for teaching and learning.

NME-ICT is focused primarily on development of high quality e-content in all disciplines and subjects at various levels. The projects under NME-ICT can broadly be classified as:
(a) e-Content Development  (b) Infrastructure Development  (c) Social Impact
The topics covered under each domain are not exhaustive but indicative.

   a) e-Content Development (including all four quadrants)
      • ICT Methodology for Teaching and Evaluation
      • Modules Preparation
      • Workshops for Training

**e-PG Pathshala**: The MHRD, under its National Mission on Education through ICT, has Sanction vide communication No. F.B-13/2011-TEL dated 29th September 2011, Grant in Aid to UGC for production of e-content in 77 subjects at postgraduate level. The content and its quality being the key component of education system, it is proposed to create high quality, curriculum-based, interactive content in different subject across all disciplines of social sciences, arts, fine arts & humanities, natural & mathematical sciences and linguistics and languages. E-content, so developed would be available in open access through a dedicated Learning Management System as well as through Sakshat Portal.

**Standing Committee, e-PG Pathshala, UGC**: The UGC has constituted a Standing Committee, e-PG Pathshala, on e-content creation to monitor and coordinate the activity of content creation in a most effective and efficient manner. In order to have uniformity of the UGC e-Content project visa viz the e-content being developed under NMEICT, MHRD, the SC UGC has been expanded to include 13 regular Standing Committee Members of the NMEICT, MHRD. The Standing Committee is the apex level decision making body for the e-PG Pathshala, at present, under the
Chairmanship of Prof. M. Anandakrishnan. The Dy. Secretary, UGC is the Coordinator of the Standing Committee, e-PG Pathshala, UGC.

2. WHO CAN SUBMIT PROPOSALS FOR e-CONTENT DEVELOPMENT?

“e-content development” is an entirely new project initiated by MHRD/UGC, it is quite possible that the PIs/Co-PIs may not have prior experience in the field similar to that of the audio-visual programmes. Proposals for e-Content development under e-PG Pathshala by a PI or PI & Co-PI(s) may be submitted, through the Host Institute under which the PI(s) are working, as per prescribed “Proforma for submitting a Project proposal” for a subject. The proposals may be submitted to the Chairman, University Grants Commission, New Delhi by any of the following:

(a) Any PG teacher, engaged in teaching in an Institution recognised by the UGC, for at least ten years, in the particular discipline.
(b) Any educational institutions in the country imparting higher education, who agree with the aims and objectives of the NME-ICT/UGC, shall be eligible to submit proposals.
(c) An Agency/Institution/Individual through invitation of the NME-ICT/UGC.

3. RESPONSIBILITIES OF THE HOST INSTITUTE.

The Host Institute, where the PI(s) is/are working may forward an application of PI(s) for e-Content development under e-PG Pathshala by a PI or PI & Co-PI(s) in accordance with the ‘Guidelines for e-content development’ and ‘Proforma for submitting a Project proposal’ for seeking financial assistance from UGC, under e-PG Pathshala, NME-ICT programme for development of e-content of a subject/course.

The Standing Committee, e-PG Pathshala, UGC having reviewed the application in prescribed format and forwarded by the Host Institute, shall call the PI and /or PI & Co-PI(s) to present their proposal before it. The Standing Committee, e-PG Pathshala, UGC, may offer its comments for modifications of the proposal, if any and approve the proposal.

The funds on this shall be transferred by the UGC to the Host Institute. In order to ensure that a number of projects sanctioned to PIs working at different Host Institutes are developed uniformly and in accordance with the Guidelines and Norms set by the Standing Committee, e-PG Pathshala, UGC, it is important that common set of understanding is arrived between UGC, all the PI(s) and the Host Institute. Accordingly a uniform Memorandum of Understanding shall be signed between the UGC, all the PI(s) and the Host Institutes individually.

4. PROCEDURE FOR EVALUATION OF PROPOSALS

The procedure for evaluation of the proposals would be more or less the same as adopted by funding agencies like UGC, DST except the benchmarks for judging the project would be suitably modified in view of above mentioned issues.

Proposals can be submitted online on e-PG Pathshala website. Each Standing Committee, e-PG Pathshala, UGC member gets an opportunity to go through the Project and review the proposal.
All the projects sanctioned under e-PG Pathshala, shall have an expert group for monitoring projects called Project Review and Supervisory Group (PRSG). The PI is required to submit names of 10 Subject Experts to the UGC and the Standing Committee, e-PG Pathshala, UGC Constituted by the UGC shall chose few or add some more experts to form a PRSG for each Subject. These expert groups indentified for sanctioned projects shall monitor the progress the progress periodically and submit the report to the SC, UGC.

5. UNDERTAKING BY PROJECT INVESTIGATOR (PI)

While submitting fresh proposals, the PIs on behalf of Implementing Institution has to submit an undertaking to the SC UGC, that the proposal being submitted by them has not been submitted elsewhere, nor is it a repetition of any other project for which they have received funding from any other agency. However, if they want to submit the same or similar proposal to any other funding agency, they should inform SC UGC.

6. PRINCIPAL INVESTIGATOR & CO-INVESTIGATOR(S) AND THE IMPLEMENTING INSTITUTION(S)

I. The Principal Investigator (PI) has the primarily responsibility for the implementation of the project. The project team consists of the PI, Co-Investigator(s) (upto two) and the project personnel appointed as per the sanction order, if any. It is necessary to ensure that the project is carried out by the project team in a cohesive manner. Periodic meetings of the PRSG are essential for this purpose.

II. In case of PIs who would be superannuating during the duration of the project, association of a “in service” Co-Investigator may be ensured by the Institute authorities. In such cases, the Institute authorities should inform to the SC UGC, well in advance, about their “no objection” for providing the infrastructural facilities to the PI for implementation of the project after his superannuation.

III. Having accepted the responsibility for the implementation of the project, the PI should be committed to implement the project over its duration and should have no plans to go on long leave.

IV. PI may engage Teachers with ten years of teaching PG experience who are in service or retired, as content writers.

V. In case, the PI is shifting to another institution on new appointment/ transfer/ long term deputation, the project could be transferred to that institution with the mutual consent of both the institutions and of the SC UGC. Such requests for transfer of the project should be sent well in advance and should be accompanied with ‘No Objection’ certificates from both the institutions and the Endorsement Certificate from the new Institution.

VI. In case the PI leaves the project due to unforeseen circumstances, the Co-Investigator could be considered as the PI, subject to the approval of Head of the Institute and the SC
UGC. Such a request should be sent at least 4-6 months in advance along with a detailed bio-data of the Co-Investigator.

VII. The PI as well as the implementing institution has the responsibility of informing the SC UGC about any change in the status of the PI/ Co-Investigator including relieving them on short term deputation for a continuous period of 3 months or more.

VIII. The project stands terminated in the absence of the PI/ Co-Investigator for a continuous period of 3 months without intimation to the SC UGC.

IX. The implementing institution has an important role to play and in consultation with the SC UGC take steps to ensure successful completion of the project, before relieving the PI.

X. The implementing Institute should provide full infrastructural facilities such as accommodation, water, electricity, and communication facilities etc. for smooth implementation of the project.

XI. Payment towards Project overhead charges to Implementing institute is not admissible.

7. PROJECT STAFF(S) & HONORARIUM TO PI(s)
   i. All personnel including Research personnel appointed under the project, for full/ part time duration of the project, are to be treated as temporary employees and will be governed by the Administrative rules/ service conditions of the implementing Institute. No reference on these issues be made to this UGC. The UGC will have no liability, whatsoever, for the project staff after completion of the project duration.

   ii. Scale and emoluments for the posts not covered under this order are governed by norms prevalent in the implementing Institution or as may be decided by this Department.

   iii. The total emoluments spent (i) on engaging personal (ii) towards the work outsourced (iii) payment of honorarium to regular staff and (iv) on procurement of Hardware and / or Software required for development of e-content should not exceed the budget allocated for the project.

   iv. Honorarium, to PI(s) if any, shall be payable only after completion of the project and acceptance of deliverables by the Government of India, Department of Higher Education, Ministry of Human Resource Development. The Honorarium shall be regulated strictly as per rules and regulations in force from time to time which, inter alia includes provision of SR-12 and within the prescribed ceilings.

   v. Further the Honorarium to PI(s) in no case shall exceed 10% of the cost of the project and no one individual would get more than 20% of his/her annual Salary as honorarium for the whole year including honorarium received from any other source whatsoever.

8. SANCTION OF PILOT PROJECT/ DETAILED PROJECT
   a) Every PI/ co-PI is required to give a presentation before the Standing Committee, e-PG Pathshala. In view of fairly wide range of available domain expertise among SC members...
as well as in the areas of teaching methodology, content development and other aspects of education. However, if the Standing Committee, e-PG Pathshala, UGC feels that expertise in certain areas is not available, the committee may associate some external experts.

b) Based on presentation and critical examination of the proposal the Standing Committee, e-PG Pathshala, UGC shall either recommend sanction of the project or may make suggestions for further improvement. The maximum duration of completing a Pilot project would be one year or as approved by SC UGC.

c) It is decided to adopt two-step approach of considering a pilot process and then request a comprehensive evaluation of the full proposal within a few months to sanction the full project by the time the pilot project can be reviewed and assessed as successful by PRSG (domain experts).

d) On completion of pilot project, the SC would invite some external experts or follow the PRSG recommendation on review of the project. Based on the feedback of the experts, the SC would invite PI for presentation for the detailed project.

9. FUNDING AND DURATION OF PILOT PROJECTS

Rule for funding of the Pilot project (under the category of content development) is restricted to Rs.7.00 Lakhs or 10% of the total cost of detailed project, whichever is more.

The funding guidelines to be followed by SC are advisory in nature. However, in special cases the SC may use its discretion to deviate from these guidelines with justification.

These guidelines may be reviewed from time to time by the UGC, so that mission objectives can be achieved.

Note: These guidelines are within the framework of NME-ICT. In case of any conflict with NME-ICT guidelines, Mission guidelines will prevail.

10. CONTENT DEVELOPMENT

E-Content Development consists of (i) Academic content writing and (ii) e-Content production. The Academic content may be written by the Subject Experts. However, the services of INFLIBNET and CEC including its EMMRCs spread across the country or Production Houses, having experience in production of e-Content and Video programmes, especially for education may be sought by the Implementing Institution. Proposals for e-Content development may be submitted keeping in mind that the product is developed and delivered to SC UGC in an integrated form, following Guidelines with regard to Template and Technical parameters:

However, if it is found that the quality of e-Content is not as per Technical and Production Guidelines, the Implementing Institution / individual assigned to produce the e-Content shall have to get it corrected within budget sanctioned to the PI.
11. **e-CONTENT MODULE & CONTENT DURATION**

Content duration has been estimated on the basis of the number of hours that are required to transact the content in the classroom. For example, a course in the classroom requires one credit and a credit is equivalent to 15 hours classroom teaching. The content of a course will be taken as 15 hours. On an average, UG students have to take 6 to 8 papers in an academic year. Therefore, during the study period of 3 years a student may take 18 - 24 papers. A paper shall comprise of 40 modules each module of one hour duration and to include production in ‘Four Quadrants’ as per Annexure-I.

12. **PROJECT MANAGEMENT AND MONITORING COMMITTEE:**

An Academic Content Advisory Committee shall be constituted by the Implementing Agency, i.e., UGC, comprising of a panel of Subject Experts, Technical Experts and Media professionals, Managers to monitor and review the progress of implementation of the e-Content Scheme assigned to the Instituted / Agency.

The committee shall be responsible for selecting and engaging (i) a Course Coordinator for each of the e-Course assigned and (ii) Production House/Agency for production of e-content Development. The Academic Content Advisory Committee shall meet once in three months, or more often if needed, to review the quality of Academic Content delivered by the Subject Experts and quality of Production delivered by the Production Agency/ Implementing Agency of each e-Content course and recommend the corrections, changes etc that are required in accordance with the Guidelines on this issued.

The NME-ICT Mission document will prevail all issues over this document in case of any conflicts and contradictions.

13. **DELIVERY OF PRODUCT**

The Programme Production Agency shall take the Academic content from the Subject Coordinator/ Subject Expert, engaged by the Implementing Agency and shall produce e-Content Module as per Academic and Technical criteria and provide Graphics, Animation and Multimedia inputs, wherever needed. The Programme Production Agency shall also incorporate necessary modifications as communicated by the Subject Coordinator or the Academic Content Advisory Committee.

14. **META-DATA AND CREATION OF INFORMATION BANK**

The e-content Development Project under NME-ICT envisages development of a large number of e-modules, video programmes, etc., related to a number of subjects of UG and PG and e-PG Pathshala. It is important that key words appearing in each module are recorded on a Production Detail Report (PDR format to be provided) by the Subject Expert/Production Agency. This information is then tagged with the e-Content and stays with it forever. A Computerized Library Management Software (CLMS) created to handle such information proves to be boon in churning out data out of an infinite number of programmes stored. Such Meta-data (data about the programmes) can be surfed by anybody on the net by pressing a keyword and the person can seek any of the information related to the programme, its synopsis, etc.
15. QUALITY CONTROL:

The content authenticity shall be the responsibility of the PI, however:

(i) Technical quality,
(ii) Subject/Academic Content,
(iii) Editorial quality
(iv) Pedagogical values etc

shall be the responsibility of the Production agency and should follow instructions on this laid down above. Further, issues concerning copyright aspects / intellectual property rights are to be taken care of by the e-Content production agency and PI.

The final products in the form of e-Content modules shall finally be previewed and approved by the Academic Content Advisory Committee before making it available to the public.

16. IPR & COPYRIGHTS

The intellectual Property Rights (IPR) and Production Copy Rights of the e-Content and other products developed shall rest with the NME-ICT, however the Subject Expert delivering the lecture(s), text, diagram's, Chart(s) etc shall submit an undertaking in writing to the SC UGC that he/she has not violate the Copyright issues on this.

17. ADDITIONAL GUIDELINES FOR RELEASE OF GRANTS IN YEARLY INSTALMENT AND FINANCIAL MANAGEMENT

i. The grants for the project shall be released on the basis of yearly requirements taking note of the progress and expenditure incurred. The first sanction order indicates the budgetary allocation for the duration of the project under various heads like Equipment, Manpower, Travel, Consumable, Contingency etc. In specific cases, the item, apart from these heads, for which an allocation is made, will be indicated separately.

ii. The first installment of grant shall be released along with the first sanction order.

iii. Diversion of funds from non-recurring head i.e., Equipment to Recurring head like Manpower, Consumable etc. is normally not allowed. However, reallocation/ re-appropriation of grants under different heads require prior approval of SC UGC.

vi. All the assets acquired from the grant will be the property of Government of India and should not be disposed off or encumbered or utilised for purpose other than those for which the grant had been sanctioned, without the prior sanction of The NME-ICT Secretariat.

vii. After completion/ termination of the project, the NME-ICT will be free to sell or otherwise dispose off the assets, which are the property of the Government. The Institute shall render to the Government necessary facilities for arranging the sale of these assets. The NME-ICT also has the discretion to gift the assets to the Institute or transfer them to any other Institute if it is considered appropriate and justified.

viii. The SC UGC reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilised or appropriate progress is not being made.
18. ADDITIONAL SET OF CRITERIA FOR MONITORING THE PROGRESS OF THE SCHEME:

The proposals will be evaluated by the Academic Content Advisory Committee, keeping in mind the following criteria:

a. Technologically Friendly: so as to be downloaded and used on any computer either independently or in a LAN situation;

b. Learner Friendly: for easy navigation;

c. Learner Centric: to be useful in self-instructional mode;

d. Teacher Friendly: so as to be used in various teaching-learning methods such as classroom lectures, tutoring to a group, lab session, etc.;

e. Employing Learner Centric Pedagogy: specifically, the designer of the e-Content should pay attention to the teaching model used - such as simple information communication, exploratory approach, discovery approach, mastery learning etc. Many types of interactive methods should be included to make the learning process effective and efficient.

f. Self-evaluative: so as to have plenty of evaluation material to give feedback to the learner as to his/her achievements in a given topic of the course and including formative as well as summative evaluation.

g. Object Based Learning/Teaching: so as to state specifically the objects of learning/teaching and employ different strategies for skill, competency and functionality developments.

19. PROFORMA FOR SUBMITTING UTILIZATION CERTIFICATE AND PROGRESS REPORT:

Statement of Expenditure and Utilisation Certificate (Annexure-II) shall be submitted to NME-ICT as per usual norms and procedures. It should also be uploaded on the Project Website linked to Sakshat.

20. INCENTIVES FOR CREATION OF e-CONTENT PROGRAMME

The teachers/subject experts who put their rich experience in the development of e-Content will be given due recognition by considering their work on development of ten e-content modules as equivalent to a publication of a paper in an International peer reviewed journal/Refereed Journals, subject to the condition that an appropriate notification in this regard is to be decided and issued by the MHRD/UGC.
### Content Generation in 4 Quadrant

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<td>Video and Audio Content in an organised form, Animation, Simulations, Virtual Labs</td>
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<td><strong>1st Quad</strong></td>
<td>e-Content</td>
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<tr>
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<td>Textual Document, PDF / e-Books / illustration, video demonstrations / documents &amp; Interactive simulations wherever required</td>
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<td><strong>3rd Quad</strong></td>
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<td>Related Links, Wikipedia Development of Course, Open Content on Internet, Case Studies, Anecdotal information, Historical development of the subject, Articles</td>
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<td><strong>4th Quad</strong></td>
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ANNEXURE – II

UTILIZATION CERTIFICATE

(To be sent to the UGC)

............................... College/ .............................University

Certified that the Project Grant of Rs. ___________________________ (Rupees ___________________________) approved by the SC UGC for e-Content Development Project at the College/University/Institution/Agency has been utilized as per details given below:

Amount of grant received from the UGC:
Details of expenditure incurred:
   (a) Honorarium to the Content Developer/Subject Expert etc.:
   (b) Secretarial Assistance:
   (c) Travel Grant:
   (d) Contingency/compilation and Communication Expenses:
   (e) Equipment/Hardware/Devices:
   (f) Miscellaneous:
   (g) Total expenditure:
   (h) Unspent balances refunded/refundable to the UGC:
   (i) Balance grant payable by the UGC:

Certified further that all the terms and conditions laid down in the SC/UGC letter no. __________________________ dated __________________________ have been fulfilled by the College/University/Agency and the grant has been utilized for the purpose for which it was sanctioned.

Certified further that the inventories of permanent and semi permanent assets created/acquired wholly or mainly out of the grants given by the UGC as indicated above are being maintained in the prescribed form and are being kept up to date and these assets have not been disposed off, encumbered or utilized for any other purpose.

1. Signature of the PI
2. Signature of the Auditor/Chartered Accountant

3. Signature of the nominated officer of the University/College/Institution/Agency authorized to operate the bank account jointly