

FEDERAL MINISTRY OF EDUCATION



Science and Technology Education Post-Basic (STEPB) Project

Revised Grant Proposal Preparation Guide (GPPG)

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STEPB Project Grants Proposal Preparation Guide (GPPG)

1. Preamble

1. The Grant Proposal Preparation Guide (GPPG) is a tool and guideline for applying for the STEP-B Grant. The tool is applicable for all post-basic education institutions (PBEIs), research departments or institutions, Ministries, supervisory agencies, and other STEP-B partner institutions interested in applying for STEP-B Project funding under all the components. This Guide should be read in conjunction with the STEP-B Project's Procurement Manual, Financial Management Manual, and Project Implementation Manual (PIM) for which the GPPG is an annex. These documents are available on the STEP-B Project website or from the National Project Secretariat (NPS). For those questions not addressed in the contents of the GPPG or the manuals, answers can be provided by the NPS.

2. The GPPG describes the information needed by proponents to complete their proposal submission forms under Component 1—the competitive Quality Enhancement and Innovation Fund (QEIF)—and Component 2— Support for the Emergence of Centres of Excellence in post-basic S&T. Whereas all proposals for submitted for funding under Components 1 & 2 will be peer reviewed by a Technical Review Committee and the International Advisory Board (in the case of Component 2), those under Component 3 are subject to a different review process.

3. For Component 3, expressions of interest will be requested by the NPS according to its annual Work Plan. These expressions of interest will coincide with the twice annual calls for proposals that govern Components 1 and 2 unless additional rounds are deemed necessary by the NPS. The Annual Work Plan is formulated by the STEPB National Project Coordinator as described in the Project Implementation Plan (PIP). The information required in these expressions of interest will be made available in the terms of reference issued for such grants. All work will comply with standard procurement procedures (see STEPB Project Procurement Manual).

4. The STEPB project¹ was developed to encourage seed activities related to science and technology within the post-basic education sector with the ultimate aim of supporting demand-driven economic growth. In the first phase of the program, five studies were undertaken by teams drawn from within Nigeria and internationally. The Study Area Reports' main purpose was to identify areas of weakness in post-basic science and technology education and elucidate mechanisms to address them. The reports and their recommendations were developed through a consultative process that included key stakeholders in the public and private sectors as well as civil society. The studies were combined in a single synthesis report available on the STEP-B website (www.stepbnigeria.net).

¹ STEPB = Science and Technology Education at the Post-Basic level. It is here defined as senior secondary schools, including technical colleges; polytechnics; monotecnics; teacher education colleges; universities and research institutes. As a group these are called post-basic education institutions (PBEIs). The project is confined to federal institutions. Private sector and non-profit institutions may take part in the project through partnerships with PBEIs and federal S&T institutions. The project is administered by the STEPB National Project Secretariat (NPS).

5. The STEPB project objective (PDO) is for Nigerian federal post-basic education and research sub-sector to produce more and better qualified Science & Technology graduates, and higher quality and more relevant research. The STEPB Project consists of the following three components and sub-components.

Table 1: STEPB Project Component Description			
Component	Sub-Component description	Funding Categories	Major eligibility considerations
Component 1 Quality enhancement and innovation fund (QEIF) in STEPB <i>45%, US\$ 81 million</i>	Sub-component 1A Competitive awards for research and technology development <i>30%, US\$ 54 million</i>	Window A Institutional awards up to US\$ 250,000, <i>18% US\$ 32 million</i> (about 140 sub-projects)	Individual PBEIs, Faculty, Department or Researcher can submit an application under this Window. Preference is however given to institutional and faculty based proposals. Individual researchers are usually not encouraged. If the implementation of the earlier sub-project is evaluated to be satisfactory, the proponents can apply for more funding to continue the research work.
		Window B Partnership awards up to US\$ 800,000, <i>10% US\$ 18 million</i> (about 22 sub-project)	Partnerships amongst PBEIs and/or with industry. PBEIs can submit a subsequent application if implementation of earlier sub-project is evaluated to be satisfactory.
		Window C (2) “Innovators of Tomorrow” awards up to US\$ 20,000 <i>2% US\$ 4 million</i> (about 250 sub-projects)	Students in their final year of study in a federal PBEI, graduating with a National Diploma, Higher National Diploma, National Certificate of Education, Bachelors, Masters or Doctoral degree in an S&T area. Awardees must provide evidence of availability of quality supervision and working facilities.

	Sub-component 1B Competitive awards for STEPB teaching and learning in PBEIs <i>15%, US\$ 27 million</i>	Awards up to US\$ 3 million, (about 9-12 sub-projects)	Applications can come from individual PBEIs or groups of PBEIs. Partnerships with the private sector and international academic and research institutions is highly desirable
Component 2 Supporting the emergence of Centers of Excellence <i>30%, US\$ 54 million</i>	Competitive awards for emerging Centers of Excellence	Awards of up to US\$ 7 million (about 7-9 CoEx)	PBEIs can apply to get support to become Centers of Excellence in an S&T area. Applicants will be required to establish (or have established) links with internationally recognized institutions in their specific S&T area.
Component 3 Supporting sector-wide initiatives and project management <i>15%, US\$ 27 million</i>	Sub-component 3A <i>10%, US\$ 18 million</i> Supporting national policy and planning and institutional strengthening	Proposal funding ceilings will be determined by the TRC.	Proposals from federal agencies and professional organizations will be eligible as part of the NPS annual implementation plan (e.g. NUC, NBTE, NCCE, NSE, NAS, STAN, MAN, NITDA, NASENI NARCT).
	Sub-component 3B <i>5%, US\$ 9 million</i> Supporting STEPB project management and administration		The National Project Secretariat will prepare and propose a project annual implementation plan that will be submitted to the National Project Steering Committee for approval.
Unallocated <i>10%, US\$ 18 million</i>			

Component Descriptions and Funding Ceilings

6. Those PBEIs applying for STEPB Project grants must tailor their proposals to fit into one of the categories (i.e., Sub-components or Windows) of the STEPB Project from Table 1. Component 1 has two separate Sub-components—the first with three windows, the second with one—that allow for a diverse portfolio of grants. Submitted proposals will only be evaluated against those other proposals competing for funds from the same funding category (i.e., Sub-component and Window).

7. This section provides details on the various components such as the funding ceilings for grants allocated in each Sub-component and examples of eligible

proposals to each Sub-component among others. The subsequent section provides guidelines on the completion of the proposal submission forms for general application (component 1 and 3) and various unique components and Window (Component 2 and IOT Grants), submission of proposals and implementation arrangements.

Sub-component 1A: Competitive grants for research and technology development

8. The three separate Windows of Sub-component 1A address different dimensions of support to research in STEPB PBEIs and their partner institutions in Nigeria and overseas. Taken together, these three Windows of Sub-component 1A are intended to improve access to research as part of S&T teaching and learning in post-basic education and support high quality research of relevance to local and national S&T needs. The three Windows in Sub-Component 1A are:

9. *Sub-component 1A, Window A: (18% of total Credit; US\$32 million). Institutional grants of up to US\$250,000 to support S&T research and capacity building within individual STEPB institutions.* This Window is intended to support high quality S&T research of relevance to local and national S&T needs through around 140 research awards. Applicants may be individual STEPB institutions or a group of institutions working in partnership. Any S&T area will be considered but applicants must justify their proposed area of research in terms of regional, national, and local development needs and private sector needs to demonstrate relevance. This requirement is particularly critical for the Window B and C, partnership and IOT awards. Completed proposals upon receipt by the NPS may be subjected to a preliminary screening to ensure that the proposals meet all technical specifications and are in line with the approved documents namely Financial Manual, Procurement Manual, Result Framework as well as relevance to the STEP-B Synthesis report. It is recommended that this exercise be conducted in collaboration with the Supervisory Ministries and Regulatory Agencies. These are then referred to the Technical Review Committee (TRC) for review. The TRC will ensure that the overall portfolio of awards covers the whole spectrum of national S&T needs. The NPS, in consultation with the TRC, may convene Technical Reviews of the proposals by subject matter specialist before being forwarded for ratification to the TRC. After the approval of the TRC, the NPS will seek the World Bank No Objection and the grants are then disbursed.

10. Applications under this Window can include proposals to pursue: (a) pure S&T research; (b) applied S&T research; (c) development of technological ideas, processes, products, and services; (d) research into S&T demands by the labor market; (e) research into S&T education and; (f) research into S&T policy development. Proposals that extend and add value to existing research are encouraged. It is recognized that many PBEIs do not yet have the necessary well-developed infrastructure in terms of access to library material, ICT connectivity or laboratory facilities and technical expertise. Proposals that request help to establish these facilities as a pre-requisite for developing a research grant proposal will be considered as well as an application for the proposal itself.

11. *Sub-component 1A Window B: (10% of total Credit; US\$18 million). Partnership grants up to US\$800,000 to support partnerships between two or more STEPB institutions (groups) and industry. Around 22 partnership awards will be made for activities involving collaboration between STEPB institutions or between such institutions and industry. The higher threshold for partnership grants will only be available to institutions that form a team of at least two institutions to undertake joint research activities. Partnerships are encouraged to cut across the entire post-basic S&T education sub-sector at the federal level, and, in particular include institutions such as senior secondary S&T education institutions, the private sector, NGOs and government S&T agencies or research-performing institutions. Eligibility and evaluation criteria and examples of areas of activity eligible for grant funding are the same as for Window A.*

12. *Sub-component 1A Window C: (2% of total Credit; US\$4 million). Innovator grants of up to US\$20,000 to individual S&T graduates (Bachelor, Masters and PhD) in their final year to encourage “Nigerian innovators of tomorrow”. These will be national competitive awards of up to US\$20,000 to around 120 students yearly. Eligible applicants are students completing their final year of study at the National Diploma (ND), Higher National Diploma (HND), National Certificate in Education (NCE), Bachelors, Masters or Doctoral programmes from any Nigerian tertiary education institution. Applicants for the award must be able to demonstrate exceptional entrepreneurialism and innovativeness in an area of economically promising research and/or technology development. Applications targeted at solving specific problem in the productive sector (Organised Private Sector or Public Sector), where the beneficiary organisation (industry or agency) has partnership and collaboration agreement with the institution where the student is studying will be given preference. In the application for the award, each proponent will detail their plan to develop or refine a commercially viable S&T idea that is still at the concept stage and also demonstrate linkage with the productive sector.*

Sub-component 1B: Competitive awards for STEPB teaching and learning in PBEIs

13. *Sub-component 1B (US\$27 million; 15% of total Credit) provides competitive grants for improving S&T teaching and learning to raise quality and relevance, efficiency and equity within participating PBEIs. This sub-component will make grant awards of up to US\$3 million per proposal for individual or groups of PBEIs focused on improving S&T teaching and learning. Eligible Sub-component 1B proposals are those oriented toward raising quality and efficiency of S&T teaching and learning. About 9 to 12 PBEIs will be awarded grants under this Sub-component over the course of the STEPB Project. Sub-component 1B will also support mechanisms that promote greater access to S&T programs at the tertiary level, particularly for women. All PBEIs are eligible to apply for awards under this Sub-component. Proposals that also aim to improve S&T learning and teaching at the secondary level (by working with other public secondary schools) will be encouraged.*

14. A few examples of the kinds of activities that will be supported by Sub-component 1B are: (a) learning and training opportunities related to identified regional skills needs; (b) teacher and lecturer development and support programs; (c)

programs for improving the public understanding of science and technology and for attracting more students, particularly females, to choose a career path in S&T; (d) mechanisms for improving the quality of intake into tertiary S&T programs and reducing failure and drop-out rates; (e) strategies for using ICT to improve STEPB teaching and learning and; (f) cooperation between PBEIs and private sector institutions that lead to more relevant teaching, research and development activities (such as industry internships for students and lecturers, “industrialist in the classroom” programs, mentorship programs with leaders in business for S&T students, etc.). Other areas of preference for funding include: solid minerals technology through investments in curricula laboratory equipment, strengthening capacity for minerals analysis, setting up of a mini-processing plant in minerals, recruiting technical assistance in specialized technologies for a limited time (technology transfer), institution seeking to become a regional hub in the promotion of distance learning education using e-learning technology; institution seeking to develop its capacity in S&T policy studies to support policy development and implementation in Nigeria.

Component 2: Support for the Emergence of Centers of Excellence

15. *Component 2 (US\$54 million; 30% of total Credit) supports the emergence of Centers of Excellence in post-basic S&T.* The objective of Component 2 is to provide around 7 to 9 of the most promising STEPB institutions with the resources necessary for them to emerge into Centers of Excellence of internationally recognized stature. Grants allocated to the 7 to 9 emerging Centers of Excellence will not exceed US\$7 million per proposal through a competitive selection process described in a subsequent section of this Guide. Centers of Excellence are conceived as institutions that are internationally recognized in their chosen S&T field. In consequence they are able to forge equal partnerships with similar institutions abroad, are able to attract research funding and contracts, and offer sought-after services to Nigerian industry. Such Centers of Excellence are defined by the InterAcademy Council as:

“A research program managed by an institution, an advanced research institute, a network of institutions or operating independently, typically in one geographic location and deemed by merit review to be of the highest international quality in personnel, infrastructure and research output.”²

16. The NPS will organize workshops, technical assistance, and a benchmarking activity to build consensus and enthusiasm among PBEIs interested in applying for STEPB Project funds through Component 2 (refer to Annex I for more information on the strategy for CoEx Component). The following areas of national priorities have been identified by the Federal Government:

16.1 Science, Technology Engineering and Mathematics (STEM) Education

Inter Academy Council. January 2004. *Investing a Better Future: A Strategy for Building Worldwide Capacities in Science and Technology*

This covers all areas of STEM education and research. It includes teacher re-training, curriculum review and development at all levels of post basic education.

16.2 Infectious and Zoonotic Diseases

This covers all diseases transferrable from human to human as well as animals to humans and vice-versa, such as Malaria, Tuberculosis, HIV/AIDS and the Vaccine preventable diseases and their immunological basis for control and eradication.

16.3 Food Security

This covers R & D in areas such as crop and animal protein production, harvest, storage, marketing, processing and pest control. For instance, Nigeria has the lowest per capita animal protein consumption among all African countries. Despite the geo-climatic advantage that the country enjoys as well as the proliferation of agricultural institutions, Nigeria can neither feed its citizens adequately nor manage properly its agricultural productions. It is also highly sensitive to any global food crisis however slight it may be. A nation without food security cannot be said to be a secure nation.

16.4 Renewable Energy

This covers research and training in areas of renewable energy such as wind, biomass, solar and hydro. With the current problems associated with oil production as well as the environmental hazards involved, studies in alternative renewable energy sources are needed.

16.5 Environmental Protection and Preservation

This covers interdisciplinary R & D in various areas causing environmental degradation such as desert encroachment, soil erosion and indiscriminate use and disposal of polythene bags and environmental abuse through activities like oil drilling, poor garbage disposal and indiscriminate digging of large holes on the road sides etc.

The protection and preservation of the environment are essential elements and prerequisites for development in other areas such as food security and health. The damage done by polythene bags alone to farmlands and drainage systems is enormous. A specialized research and development centre of excellence on this is essential.

16.6 Solid Minerals Research and Development

This center will focus on all areas of research and development in solid minerals in the country. This will include all forms of minerals available in the country.

16.7 Advanced Materials Science and Manufacturing

This covers R & D in materials science, mechatronics and manufacturing, including nanotechnology. Materials science is the backbone of all aspects of engineering development. Areas such as nanotechnology are the technologies of today and the future.

16.8 Software Engineering

This is to focus on all areas of software engineering research, training and development so as to develop necessary skills in those who intend to specialize and produce appropriate software for national development. Even though the focus will be on software R & D, there could be general supporting courses in hardware and networking.

16.9 Chemical Technology Research & Development

This covers all areas of chemical research including petrochemical and other fossil energy technologies.

16.10 Multimedia Technology and Cinematography

This covers all areas of multimedia that can be adopted for learning, teaching and research. This includes graphics, animations and film production. The rapidly developing film industry in the country lacks the support of R & D in the arts and science of film industry and all its ramifications.

16.11 Biotechnology and Genetic Engineering

The center will focus on all aspects of biotechnology and genetic engineering research, capacity building and development.

17.1 Examples of activities and items that might be funded for Centers of Excellence are: (a) the purchase of new, modern laboratory equipment; (b) light rehabilitation of essential laboratories (the construction of new facilities will not be supported); (c) cooperative international scientific projects with research teams outside Nigeria; (d) the installation of ICT, library media and related equipment; (e) training of staff for capacity building and management (technical mid-level and higher-level staff and technicians); (f) workshops, conferences, study tours; (g) research stipends; (h) stipends for doctoral students and post-doctoral scholars to conduct research at the centers and; (i) awards to attract visiting professors from outside Nigeria to teach and conduct research at the Centers.

17.2 Characteristics expected of emerging Centers of Excellence will include the following:

- Productive partnerships with overseas and African institutions of acknowledged expertise in the area of focus of the Center of Excellence. These include not only collaborative research and development partnerships but also activities such as training (at all levels), electronic sharing of teaching and learning materials, and regular exchange of staff;
- Productive partnerships within Nigeria with private sector institutions, other PBEIs, government agencies and NGOs in the area of expertise of the Center;
- Well-equipped facilities for research and development;
- An effective and efficient program producing high quality graduates (with particular attention to female graduates) at all levels in the discipline of the Center that meet the demands of the labor market;
- A consistent and sustainable output of peer-reviewed research papers, patents, research and consultancy reports;
- A verifiable impact on socio-economic and technical development and ultimately on the quality of life in Nigeria.

Key features of competitive STEPB grants proposals

18. The STEPB project invites institutions and their partners in the post-basic S&T education sub-sector to submit proposals for Components 1 and 2 that address priority issues identified in the study area and synthesis reports. Selected proposals will be:

- innovative
- clearly-focused
- achievable
- responsive to local and national S&T-related needs

19. Selected proposals must demonstrate high probability of impact on two levels. First, they should show evidence of a strong link between the initiative proposed and the strategic objectives of the institution in which they are located. Second, proposed initiatives should have a high propensity to improve Nigeria's economic development in relation to the development priorities defined in NEEDS and the various SEEDS. Collectively the funded grants will contribute to strengthening PBEIs through innovations that can be replicated across the system. Grants should focus on the development of new systems and processes rather than the creation of infrastructure. Capacity building should be a central element. Proposals that bring together several institutions are strongly encouraged, particularly those that involve cooperation between federal institutions at different levels, including secondary schools as well as strategic partners, particularly the private sector, non-governmental organizations, etc. Each partnership should identify a lead institution that will take overall responsibility for project management. Institutions may submit more than one proposal, subject to certain funding thresholds for total STEPB Project participation per institution.

20. Proposals should not include requests for construction of buildings, payment of salaries for institutions' staff, or cover student bursaries.

21. A clear structure should exist within each institution applying for STEPB funding to operationalize the proposed activities in a timely manner. This structure

should be built upon existing administrative structures and transparent procurement and accounting procedures. Further, it is expected that an institutional contribution to any STEPB grant received will be made to ensure funding sustainability beyond the lifespan of the STEPB project. Each STEPB proposal should include a work plan, a results framework, a monitoring and evaluation framework, a sustainability plan and a convincing strategy on how operational risks (e.g., financial, environmental, etc.) are to be minimized and, in particular, how corrupt practices will be pre-empted. Grant activities that add value to existing programs are encouraged.

2. Developing the proposal

22a. All Institutions preparing proposals for funding under the STEP-B project must ensure that the proposals address the challenges of relevance and integration of Nigerian S&T education at the post basic level to local realities and global development milieu as discussed in detail in the synthesis report and also geared towards meeting the PDO of the STEP-B Project. In this wise the Supervisory Ministries and Regulatory Agencies (SM & RA) are enjoined to:

- i. Support the institutions in building capacity for proposals preparation;
- ii. Assist the NPS in proposals evaluation; and
- iii. Provide, in close consultation with the NPS, implementation support to the institutions under their purview in the management of their sub-projects.

22b. All proposals should be submitted to the NPS using the approved proposal submission form attached as Annex A. A separate form has however been designed for the IOT component and attached as Annex B. The following annexes are key documents to be submitted before proposals are passed for evaluation. These are:

- Annex: Copy of the institution’s strategic plan
- Annex: Copy of the institutional procurement guidelines
- Annex: Copy of the report of the most recent audited accounts (previous 3 years)

23. Upon receipt of a STEPB grant proposal, the NPS will first ensure that each proposal meets certain required pre-qualifications criteria. This aspect of the assignment of the NPS can be accomplished in conjunction with the Supervisory Ministries and Regulatory Agencies. The items on which this pre-qualification is based are listed in the table below. In the event that a proposal does not meet any of the stated criteria the proposal will be returned to the proponent for due completion before the close of the advertised period of the Call for Proposals.

S/No	Required Criterion for Submission to TRC	Check if “yes”
1.	Required contents and annexes provided (i.e., title, contact information, audited record of accounts and other annexes)	
2.	Number of staff required to execute the proposal is not excessive and there is an appropriate gender balance in the composition of the implementation team	
3.	Evidence that the budget request is manageable and is not excessive in relation to	

	the annual budget of the institution(s)	
4.	CVs of participating individuals attached to the proposal	
5.	The objectives of the proposal are related to national policy objectives and local, national, or regional needs	
6.	Proposal addresses STEPB PDO	
7.	Work Plan is attached, clear, and comprehensible	
8.	Objectives and proposed outcomes stated clearly	
9.	Evidence provided of capacity for transparent and accountable procurement, financial management, and auditing procedures	
10.	Availability of institutional strategic plan	
11.	Evidence of partnership for proposals under sub-Component 1A window B and sub-Component 1B, Component 2	
12.	Appropriate physical facilities and communications networks if the development of these is not a component of the proposal	
13.	Evidence of submission of baseline data	
<p>If all boxes are checked, then proposal can be submitted to the TRC for review; If any box is not checked, then return to applicant for completion before evaluation</p>		

All proposals that meet the pre-qualification criteria listed above will be subjected to evaluation by the Technical Review Committee (TRC). The TRC will receive proposals from the NPS who will have removed all identifying data and assigned a serial number to each proposal.

24. The following explanatory table 3 indicates the elements that if applied in preparing grant applications will enhance the competitiveness of proposals submitted for review.

Criterion	Scope
Track record of performance in the area of the activity, including a record of cooperation with other institutions	<ul style="list-style-type: none"> Track record might include research, teaching, partnership building, and data gathering. publications, patents, products Collaboration with other institutions might include teaching, research, technology development, product development. Institutions might be public or private, educational or technical, internal or external The added value brought by the different members of the consortium should be clearly indicated
Appropriate physical facilities and	<ul style="list-style-type: none"> It is expected that physical facilities (workshops, laboratories, equipment, ICT networks, etc) should either

communications networks if the development of these is not a component of the proposal	<p>be able to accommodate the sub-project activities, or that a component of the proposal should address and remedy any deficiencies. These issues should be made explicit in the proposal.</p> <ul style="list-style-type: none"> Proposals should also demonstrate that the facilities can be appropriately managed and if not, to include the necessary training requirements
Demonstrable human and institutional capacity to manage a project of the size proposed	<ul style="list-style-type: none"> Proponents should show that the number of staff required to execute the sub-project is not excessive in relation to the number of staff available in the S&T-based programs CVs of participating individuals should be attached to the proposals Proponents should show that the budget request is manageable and is not excessive in relation to the annual budget of the institution(s)
Addresses local, regional, and/or national needs	<ul style="list-style-type: none"> The project should be justified in terms of national policy objectives and regional or local needs It should address issues highlighted in the STEPB report
Availability of funding and other support from other sources	<ul style="list-style-type: none"> The full contribution to the sub-project by the proposing institution should be indicated, particularly any contribution that is over and above recurrent expenditure. Contributions may be non-monetary Other sources of funding from outside the institution will be an advantage. Proposals that add additional dimensions and value to existing activities are encouraged
Demonstrable benefits outside the realm of the specific institution(s)	<ul style="list-style-type: none"> Innovative programs that address the aims of the STEPB Project and could, if successful, be replicated elsewhere or effectively taken to scale are encouraged and proponents should show how such a process can evolve The promotion of the public understanding of science and technology and of entrepreneurship will be supported Proposals that support the commercialization of research and development will be supported
Improved human and institutional capacity including enhanced links with partner institutions and improved research teaching and learning quality	<ul style="list-style-type: none"> Sub-projects should indicate how training needs will be met. These should include training in ICT skills, management skills and technical skills Realistic estimates should be provided showing how many students will enter programs of higher learning as part of the proposal The proposals should indicate how proposed improvements in teaching skills are to be brought about Improved institutional capacity includes enhanced facilities, improvements in research support, improvements in teaching and learning activities, better articulation between different level programs etc. The added value from the proposed multi-institutional cooperation should be clearly articulated including a sustainability plan for the partnership
Sound project plan	<ul style="list-style-type: none"> The plan should be clear, coherent, feasible and

<p>demonstrating feasibility, sustainability, risk analysis, achievable timeline, results framework and short start-up period</p>	<p>realistically achievable in the timeline indicated. It should be clear how it meets its objectives. It must show how it can sustain its impact and outputs after project support ceases</p> <ul style="list-style-type: none"> • A project work plan should be included which should be detailed for the first year • The anticipated impact of the project should be clearly articulated including, where appropriate, improvements in the quality of teaching and learning, improvements in efficiency of teaching programs, improvements in equity (in particular female enrolment), impact on the labor market, improvements in research capacity and quality • The plan should include a risk analysis and an indicator matrix for all major activities
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25. An important part of the assessment of potential STEPB grantees will be an evaluation of applicants' financial management capacity. Evidence of satisfactory internal institutional audits (for the previous three years) in addition to a statement of financial management capacity, and an assertion of the complementarity between the institutional strategy and the objectives of the grant will be required for eligibility. Once approved, grantees will undergo training to comply with the audit requirements of the STEPB project. These audit requirements are detailed in the Financial Management Manual.

STEPB Grant Proposal Budgeting

26. With respect to the budgetary requirements of STEPB Grant proposals, the following key elements must be furnished within any submitted proposal:

1. Detailed budget for the lifespan of the proposed activity
2. Detailed budget for the first year of the grant (for long lists, put information into an annex)
3. Budget available from institutions and other sources (for long lists, put information into an annex)

27. Sound planning is the key to successful STEPB grants administration. All proposals submitted by proponents for STEPB grant selection will contain detailed budgets. These will be reviewed as part of the selection of grantees. Budgets should be detailed for the first year and estimated for subsequent years. Where appropriate, the bases for calculating the budget should conform to standardized actual costs as provided by the NPS. The standard unit costs for common items (e.g., workshops, meetings, running costs of small vehicles, internal TA, external TA, serviced office space per person per year, etc.) are shown in the Project Implementation Plan that can be supplied by the NPS. Grantees' budgets should be submitted in a standardized electronic format (spreadsheet) provided by the NPS and available on the STEPB website. Once winning grants are selected, the budgets contained in their proposals will form the basis of the grant contract and of all future grant administration planning. [If grantees find they need to amend their budgets, they must seek permission to do so in writing from the NPS. Letters to the NPS seeking to amend budgets must provide full justification for the change, and ensure that it does not substantially alter the goals or objectives of the research.]

28. The budgets from the proposals will be incorporated into the grant contracts as these are drawn up.

STEPB Grants Implementation Matrix

29. To ensure clear and transparent implementation, monitoring, and evaluation, each proponent must provide a description of how the grant will be implemented, monitored, and evaluated. To do this, each STEPB grant proposal should include an implementation framework. Annex A provides a template of the kind of implementation matrix expected. This template draws the information provided in the proposal together in a coherent table and clarifies the relations between activities, responsibilities for implementation, cost aspects, and results.

30. STEPB project grantees must provide bi-annual reports that identify progress against the indicators included in the implementation, monitoring, and evaluation matrix. These reports will need to be accompanied with auditing, financial management, and procurement records in accordance with the STEPB project Financial Management and Procurement Manuals.

3. Eligibility and selection of STEPB grant proposals

31. In developing STEPB grants proposals, interested proponents are advised to bear in mind the eligibility and selection criteria against which their proposals will be evaluated. These criteria differ for Component 1 and 2. Those of Component 1 are presented below. Those for Component 2 are contained in Annex B.

Criteria for Eligibility for Grants for Component 1

32. Two sets of criteria guide proposal selection for Component 1 listed in Tables 4 and 5 below. Proposals will be allocated points by reviewers according to each category as indicated in the following tables. The total possible score is 100 points. The top proposals in each Sub-component with the most points in each Round will be short-listed.

Table 4: Eligibility criteria	Weighting
Track record of performance in the area of the activity, including a record of cooperation with other institutions	9
Transparent and accountable procurement, financial management, and auditing procedures	6
Explicit linkage to the strategic objectives of the institution(s)	5
Appropriate physical facilities and communications networks if the development of these is not a component of the proposal	5
Demonstrable human and institutional capacity to manage a project of the size proposed	5

Table 5: Selection criteria	Weighting
Addresses local, regional, and/or national needs (e.g. as defined in the STEPB report, NEEDS document, S&T policy, NPE etc.)	10

Availability of funding and other support from other sources	4
Demonstrable benefits outside the realm of the specific institution(s)	8
Improved human and institutional capacity including enhanced links with partner institutions and improved research teaching and learning quality	24
Sound project plan demonstrating feasibility, sustainability, risk analysis, achievable timeline, results framework and short start-up period	24

33. The following elements if applied in preparing proposals will enhance the clarity of proposals to be submitted to the Technical Review Committee.

1. How well the activity fits the requirement for it to be an innovative program that addresses the aims of STEPB Project and could, if successful, be replicated elsewhere or effectively taken to scale.
2. The capacity of the institution to manage the grant effectively, transparently and in a timely manner.
3. How effectively the project incorporates the minimum criteria given in Tables 4 and 5 above.
4. The clarity and coherence of the proposal implementation plan and how well the plan addresses the stated objectives.
5. Academic and technical merit.
6. The balance between curriculum reform, staff development and facilities upgrading.
7. The impact of the proposal on:
 - The quality of S&T teaching and learning;
 - The quality of S&T research;
 - The relevance of the above for the labor market;
 - Female enrolment in S&T-based programs.
8. The added value provided by the different members of a consortium.
9. The effectiveness of the manner in which the sub-project is integrated into the existing activities of the institution or consortium and how well it addresses the aims in the institutional strategic plan; this will include an evaluation of the financial contribution of the institution.

34. Once the proposals are cleared by the NPS, they may be presented to the Technical Review Committee (TRC) for evaluation. Each proposal is evaluated by at least three separate TRC reviewers with sufficient expertise to make a determination on the quality of the proposal. The report of the reviewers is presented to the TRC by the National Project Coordinator (NPC) with a ranking of the submitted proposals according to the detailed criteria. The NPS can only recommend proposals which scored 70% and above for funding under any of the components. The TRC may however make specific recommendation on each of the proposal based on the following observations:

- The proposal qualifies for funding without any revisions
- The proposal qualifies for funding after minor revisions. In this case the TRC will designate one reviewer to review the revised proposal once resubmitted

- The proposal is promising but requires major revisions. Such proposals will be recommended for resubmission during the next Call for Proposals
- The proposal does not satisfy the minimum criteria. Such proposals will be rejected outright.

35. Successful applicants will have up to 2 years to utilize the funds with the possibility of extension if the funds are not fully utilized within this period. Unsuccessful applicants will be assisted to revise their proposals and resubmit during the next call for funds. Institutions evaluated to have successfully achieved the objectives of the first grant may apply for a subsequent grant within the project duration.

Grants for Component 2

36. Component 2 proposals are processed according to a similar procedure as that for Component 1 using the sample application form on Annex A, but with an additional set of minimum criteria. This additional set of criteria is designed to ensure a stronger link between the proposed Emerging Center of Excellence and Nigeria's growth agenda as elaborated in the National Vision 20-2020, 7-Points Agenda, NEEDS and the various SEEDS. Proposals for Component 2 support should comply with both the eligibility criteria listed for Component 1 and the additional selection criteria for Component 2 as contained in Annex B.

37. Grantees are expected to develop comprehensive links with at least one external institution of repute. The process for establishing this link, the justifications for it, and anticipated outcomes should be an element of the Centers of Excellence proposals.

4. Diversity and Complementarity

38. It is hoped and anticipated that the STEPB project will generate a great deal of interest among Nigeria's PBEIs and their partners. To ensure a broad spectrum of grants awarded in a range of relevant and high priority disciplines, a mechanism has been created that will factor in complementarity between grants into the grants selection process. Termed the "portfolio criteria," this mechanism allows assurance of diversity among the final grants awarded chosen from among the short-listed candidates in each Round.

39. Above and beyond the merit of any one individual proposal, the Technical Review Committee will also consider the complementary nature of the proposals when looked at as a portfolio. To serve the purposes of the STEPB project and to ensure the largest total impact of the STEPB project, decisions to maintain diversity and complementarity among the final proposals selected in each round may result in projects with higher scores in essential criteria such as "national relevance" being selected over projects with higher scores in other areas such as "track record of research." This could mean that if several proposals from the same discipline (biology, for example) score highest in a given Round of competition, the TRC may recommend just the top one or two and then choose other proposals with better scores in other criteria. This portfolio approach ensures the highest possible national impact

of the STEPB project across the whole S&T sector and its various aspects (e.g., scientific and policy research, teaching, learning, infrastructure and technology development, etc.) and disciplines (e.g., fisheries, ecology, ICT, metallurgy, engineering, etc.)

Appealing the decisions of the TRC

40. Applicants for funding under any Component who may be dissatisfied with the recommendation of the TRC or IAB may request a review of the decision within 15 days of its publication. The appeal should address in detail the reasons why they are requesting a review. The review will be carried out within a further 15 days.

5. Proposal Selection and Processing

Component 1

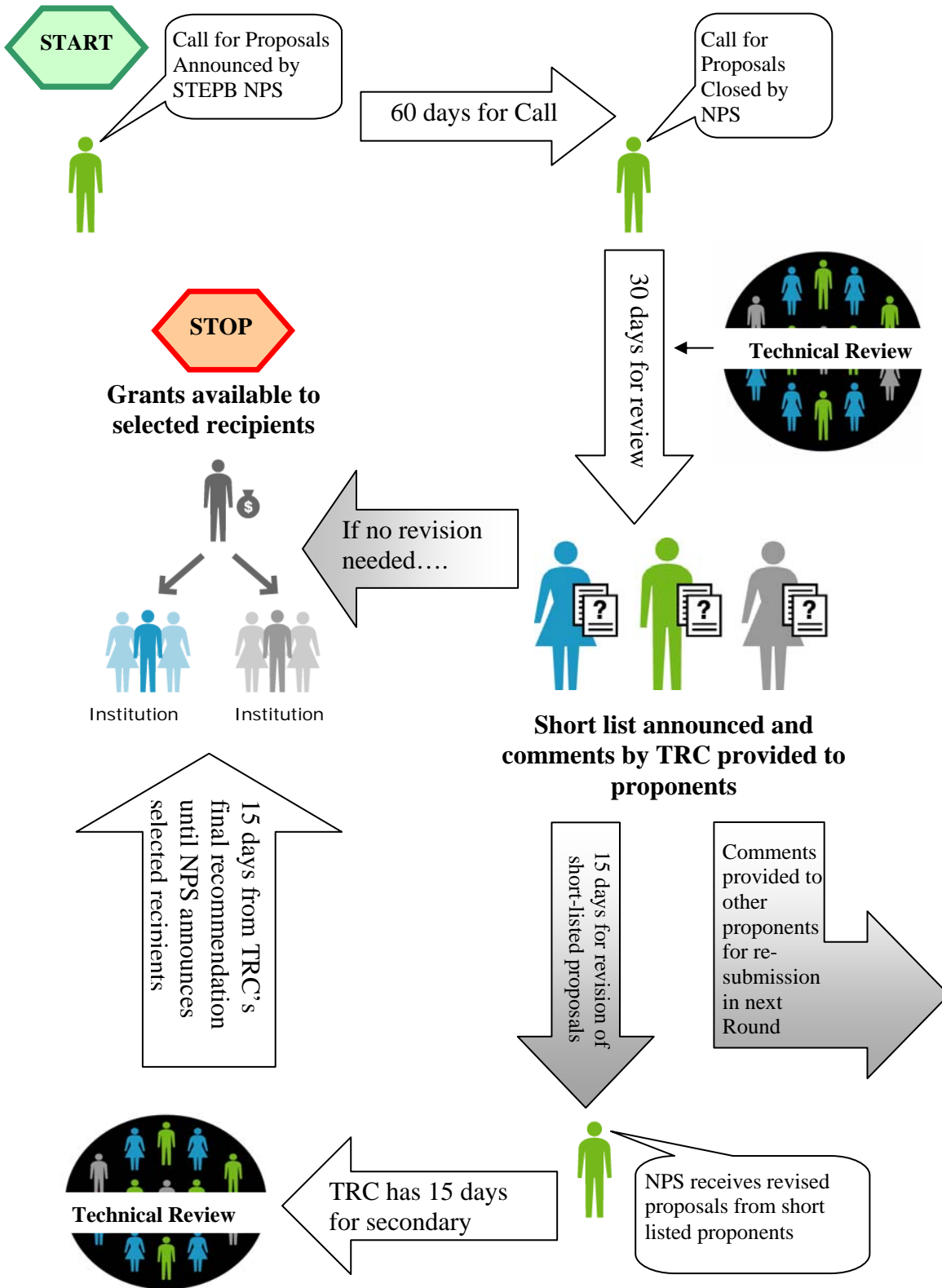
41. Processing of proposals for funding under Component 1 of the STEPB project starts with a Call for Proposals that will be publicly announced by the NPS every six months. There will be 2-3 Calls for Proposals before Mid-Term Review (MTR) of the STEPB project occurs. After this, there may be additional rounds depending on availability of funds. Proposals approved for funding prior to the MTR will continue to be funded, provided that they continue to perform satisfactorily. The sequence of events from a Call for Proposals to public announcement of successful applicants is as follows:

1. Calls for Proposals will be issued two times per year
2. Once announced, a Call for Proposals will remain open for 60 days during which proponents are invited to submit completed applications for STEPB Project financing to the NPS (all submissions must be made in electronic format; hard-copy submissions may accompany electronic submissions)
3. Once the Call for Proposals is closed, the NPS will confirm within 10 days that a proposal has been successfully received; Incomplete proposals are returned to the applicants for completion; The proposals will be screened by the NPS to ensure that all the required documentation has been received and that all prerequisites for evaluation have been met
4. At the close of the Call for Proposals, the NPS forwards the proposals to the Technical Review Committee for evaluation
5. The Technical Review Committee (TRC) will have 30 days to review the proposals and submit their recommendations to the NPS
6. The process of proposal review results in one of four outcomes for every proposal submitted:
 - i. reviewers agree that the proposal is cleared as submitted as a candidate for STEPB Project funding
 - ii. proposal is short-listed for possible funding and the proponent is invited to respond to comments/and or implement minor amendments within 15 days and resubmit the proposal to the reviewers
 - iii. reviewers do not short-list proposal but provide substantial comments and suggestions for amendments which must be

- implemented by the proponent(s) before resubmission in subsequent Calls for Proposals
- iv. proposal does not meet quality and content criteria of the reviewers and is rejected outright
 7. Cleared proposals will be publicly announced on the project website and formally notified by the NPS; Short-listed proposals will also be announced on the project website by the NPS and proponents formally notified of the comments/recommendations of the TRC; As indicated above, short-listed proponents whose proposals could be improved by responding to the comments of the TRC will be given 15 days for revision of their proposals
 8. The TRC will then have 15 days to review the revised proposals before submitting their final rankings to the NPS.
 9. Within 15 days the NPS will publicly disclose the final list of successful proposals, the amounts approved in each case and the names of the principal recipients of STEPB Project grants for that Round of Competition. The announcement will be made on both the STEPB website and in at least one press outlet with national coverage
 10. Proponents of approved proposals will be invited to sign agreements with the National Project Coordinator, NPC, on behalf of Government, within 30 days of the announcement of the final list of successful projects. Disbursement of funds to the recipients will be implemented immediately following the signing of this agreement and in accordance with the procurement procedures laid out in the Procurement Manual
 11. Prior to disbursement, the NPC may, as part of his/her fiduciary responsibilities, conduct a visit to any of the recipients for verification of the capacity to implement the project.
 12. All proposals should be designed so that they can start operating as soon as funding becomes available. This implies preparatory work to establish effective operational structures within grant-receiving PBEIs prior to the grant recipients being announced.

The following figure illustrates the process.

Figure 1: Application Cycle for Competitive Grant Proponents for STEPB Project



NPS = National Project Secretariat; TRC = Technical Review Committee

Component 2

40. Processing of proposals under Component 2 will be similar to the procedure described for Component 1 proposals, however, attached as Annex I is the approved strategy document approved by the NPSC to provide direction on the national research priority areas for intervention under Component 2: Support for Emerging Centres of Excellence. The criteria for evaluation of the proposals are contained in the attached as Annex B. The strategy and criteria have strong linkage with Federal Government 7-Point Agenda, NEEDS and Vision 20-2020. The National Project Steering Committee however, reserves the right to issue additional criteria to complement those already approved with a view to ensuring the achievement of the objectives of this Component.

Institutional applications under Component 2 are mandatorily required to include a short statement on why the institution should be considered as the preferred choice by the TRC and IAB. The statement should be concise, explicit and convincing, as it will add to the overall assessment by the STEP-B.

41. Grant proposals for funding under Component 2 will be submitted for evaluation to the International Advisory Board (IAB). The IAB will recommend a shortlist of recommended proposals to the TRC through NPS. Both the IAB and TRC will evaluate the proposals using the same detailed and transparent criteria for evaluation approved by the NPSC. The TRC sends its recommendations to the National Project Steering Committee through the National Project Secretariat. An applicant whose proposal is rejected may appeal the decision in the manner set out above under component 1.

6. Submission of the proposal

42. All proposals **MUST** be submitted to the STEPB NPS electronically in either an emailed format, on a CD, or a DVD. The call for proposals which will be widely publicized and hosted on the STEPB website will indicate the appropriate mechanism for electronic submission of proposals during any given Round.

43. Interested institutions and consortia should submit their proposals according to the format attached in the annexes. Submissions should be made directly to the NPS.

Annex A



Science and Technology Education Post-Basic (STEPB) Project

Proposal Submission Form

This STEP-B PROJECT Proposal Submission Form is available at the National Project Secretariat

Please complete the Form (in duplicate) fully, clearly and send them to the National Project Secretariat Add an electronic (soft) copy.

Originating institution(s):

Project Name:

Total Amount Requested:

Programme Component/Sub Component:

- Component 1
 - Sub Component 1A
 - Window A
 - Window B
 - Sub Component 1B
- Component 2
- Component 3A

Section 1: Contact Details

Main contact person:

Position:

Organisational unit(s)

Institution(s):

Mailing address:

City/Town:

Email address:

Office phone:

Office fax: _____

Home phone:

Cellular phone:

Alternative contact person:

Position:

Organizational unit(s)

Institution(s):

Mailing add

Email address:

Office phone:

Home phone:

Office fax: _____

Cellular phone:

Section 2 Identification of Problem and Statement of Objectives:

1. Briefly analyze the particular problem that the proposal is designed to address in your department, cost centre, or institution. (a) What is the problem? (b) What has caused the problem? (c) How has the problem affected teaching, learning and/or management of activities in your department or institution?

2. Describe how you propose to address this problem.

3. What specific performance improvements (in teaching, learning or management) does this proposal seek to bring about in your institution?

4. State the particular innovation(s) that will be introduced by the proposal.

** Innovation is defined as “a new or different way of doing things that brings about improvement”.*

[Please read the STEP-B project Manuals such as Project Implementation Manual, Project Appraisal Document and the Synthesis Report on STEP-B website for additional information on innovation]

5. Describe how the new or improved ways of teaching, learning or management of programmes/activities stated can be achieved through this proposal.

6. What specific aspect of your institution's strategic plan will be addressed by this proposal? (Provide appropriate references).

7. Demonstrate how the expected accomplishments described in Questions 3 and 4 are related to specific objectives of STEP-B sub-project. Small Proposals must show a clear relationship with **at least one** specific objective.

Section 3: Description of Activities

Describe in order of sequence all the activities that will be undertaken during the project, their purposes, and the ways in which they will interact. This should include, for instance, a description of new courses to be offered in the proposed programme; new types of awards these would lead to (SSCE, NCE, Diploma, Bachelors, Masters, and/or Doctorate degrees etc); the credentials, role, and length of stay of any visiting professors or technical experts; the

contribution of any visiting professors; use of any requested pedagogic and library materials; and the role and expected use of any laboratory equipment requested.

Activity 1:

** An Activity is explained as actions or steps with clearly defined start and end points. The end of an activity becomes a milestone. A Small Proposal should, ideally, have not more than two milestones*

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 2:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 3:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 4:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 5:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 6:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 7:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Activity 8:

Describe in detail what this activity entails:

How will this activity improve teaching, learning or management in your department or institution(s)?

Section 4: Statement of Context:

This section should provide a brief summary of any related programmes/activities undertaken in your institution or in other institutions. It should explain the extent of the similarities and differences with these existing programmes how they will address similar or different needs, and any collaboration, complementarity, or resource-sharing that may be possible.

Related Programme (name + institution)	
Similarities:	
Differences:	
Complementarities:	
Collaboration/ Resource Sharing:	

Expand table as necessary

Section 5: Use of Existing Institution Resources by the Proposal

List existing relevant resources in your department, unit or institution that will be used in the project. These may be special equipment, existing labs, library collections or journal subscriptions, available human resources from other departments, etc. These will be important for judging the proposal’s potential contribution to efficiency improvement.

Activity 1: Production of modules for Trainers and Trainees.			
Progress Indicators:	Phase One *	Phase Two	Final Phase (Milestone 1)
Activity 2:			
Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone 2)
Activity 3:			
(a) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(b) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(c) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(d) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(e) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(f) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(g) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(h) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(i) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(j) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(k) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)
(l) Progress Indicators:	Phase One	Phase Two	Final Phase (Milestone3)

Resource	Currently used for and by	Proposed Project Use

- Section 6: Progress Indicators

Provide progress indicators for monitoring the implementation of the main activities you listed. The final completion of each activity will constitute a “milestone”. These milestones will become part of the Performance Agreement for funding and will determine the schedule for disbursement of approved funds. If any activity involves training, complete Section 11.

(Use additional rows if needed)
activity with a time dimension.

*Phase is used here to describe a stage/segment of an

Section 7: Outcome (Results) Indicators for measuring the effect/impact of STEP-B SUB-Project Proposals

Please think carefully about how you would measure the outcome (result) of the innovation you described, Question 4, on the problem you outlined in Section 2, Question 1. How will you determine whether teaching, learning or management in your department, unit or institution has actually improved as a result of carrying out your proposal? Clearly state the outcome (result) indicator(s) for your project in the space below. The outcome (result) indicator(s) should measure the performance improvement targeted in your response. Bear in mind that an outcome (result) indicator should be substantiated by empirical evidence of some kind (e.g., examination, scores, pass rates, measurable increase in competency, number of graduates, etc.) and not rely solely on personal judgment.

Activity:1	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:2	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:3	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:4	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:5	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:6	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:7	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Activity:8	Expected Outcome(Result)	Indicators of Outcome (Result)	Means of Measurement / Verification
Overall Project:	Expected Outcome (Result) by the end of the project	Indicators of Outcome (Results) / Impact	Means of Measurement / Verification of outcome(Results)/Impact
<i>Expand table as necessary</i>			

Section 8: Budget Proposal/Justification of Expenditure:

Provide **a detailed list of all budget items** along with a statement of their purpose and a teaching, learning, or management related justification for their inclusion in the proposal.

The estimated cost of each item should be given in Naira for expenditures to be made within Nigeria (e.g., local training), and in US dollars for expenditures that will be made outside of Nigeria (e.g., importation of teaching equipment). Equipment purchases should include detailed generic specifications. Group smaller items according to their purpose and provide the corresponding information. For instance, laboratory consumables and minor lab equipment may be grouped together and given a single justification. **Add additional lines as needed.**

Note: The total dollar value of the proposal should be inserted in the appropriate space at the top of page 1. Approved expenditures in Naira will be disbursed to the STEP-B Project account in the tertiary institution.

Activity	List all Items that are required to carry out each activity in Section 3	Provide justification for the requests (explain their purpose and how they will be used)	Cost Naira	C U
		<i>Total</i>		
		<i>Exchange rate</i>		
		<i>Dollar equivalent of Naira total</i>		
		<i>Total value of Proposal budget in US Dollars</i>		

Section 9: Financial Plan/ Performance Milestone Payment
(Schedule of Disbursements)

Use the performance milestones for each activity from the Final Phase column of Section 6 to define a schedule of funding disbursements for your approved proposal and insert them in the places indicated. Also calculate the funding you will need in Naira and in foreign exchange to achieve each milestone, and enter it in the place indicated. The schedule of disbursement should be consistent with your budget in section 8.

Notes:

¹ Naira amounts are for expenditures to be incurred in Nigeria and will be disbursed to the institution's STEP-B Project account.

² US dollar amounts are for expenditures in foreign exchange and will be paid by the STEP-B Project Unit on the basis of invoices approved by either the Head of the Institution or Project Manager and submitted to the STEP-B Unit for payment.

S/No	Disbursement Activity	Naira(=N=)¹ Amount	U.S. Dollar (\$) ²
1	Disbursement #1: After award and upon Signing	[amount needed to achieve #1] #1]	[amount needed to achieve #1]
2	Disbursement #2: (Insert progress indicator relevant Activity that will funded)	[amount needed to achieve #2]	[amount needed to achieve #2]
3	Disbursement #3: (Insert progress indicator relevant Activity that will funded)	[amount needed to achieve #3]	[amount needed to achieve #3]

Section 10: Procurement Plan – Consultancy Services

1	2	3	4	5	6
DESCRIPTION OF SERVICE	BUDGETED AMOUNT	LUMP SUM CONTRACT (yes / no)	PROCUREMENT METHOD	PRIOR / POST REVIEW	INITIATING UNIT

Instructions:

- Column 1: Precise description of service to be performed.
- Column 2: Reliable estimate of likely cost of this service.
- Column 3: A lump sum contract is for a fixed amount a non-lump sum contract varies according to time spent or effort made.
- Column 4: Method: (a) Quality and Cost Based Selection; (b) Comparison of Qualifications; and (c) Least Cost Selection. The procurement method is determined by the characteristics of the service required and the value of the contract.
- Column 5: Prior review – World Bank written no-objection required before proceeding with tender; Post review – World Bank review after award of contract. The type of review required is determined by the method of procurement and the value of the contract.
- Column 6: Name of institutional unit that is submitting this proposal.

Provide Terms of Reference (TOR) for all consultancy assignments

Section 11a: Training Plan (Overseas)

Please list each institutional employee who will benefit from training outside the country under the proposal. Relate the plan to the activities defined in Section 3 of this proposal.

NAME	Date of Birth	Position	Area of Study	Type of Training	Level of Competence to be Achieved	Location of Training	Dates of Training	Estimated Cost	Comment

Section 11b: Training Plan (Local)

NAME	Date of Birth	Position	Area of Study	Type of Training	Level of Competence to be Achieved	Location of Training	Dates of Training	Estimated Cost	Comment

Section 12: Implementation Plan (Gantt chart recommended)

ACTIVITY	Person Responsible	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Activity 1:						1							
Activity 2:													
Activity 3:													
Activity 4:													
Activity 5:													
Activity 6:													
Activity 7:													
Activity 8:													

Implementation Plan: Continue for STEP-B Regular Proposals

ACTIVITY	Person Responsible	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
Activity 1:													
Activity 2:													
Activity 3:													
Activity 4:													
Activity 5:													
Activity 6:													
Activity 7:													
Activity 8:													

Section: 14 Agreement of key members of the Proposal Implementation Team to collaborate

We the undersigned Project Participants have agreed to collaborate on this Project

Name: Signature: Date:

Name: Signature: Date:

Name: Signature: Date:

Name: Signature: Date:

Section 15 Statement of Institution Co-financing Support and Project Endorsement

(To be signed by the Head of the Institution/Faculty/ School)

I, _____ endorse this project proposal and I am fully committed to its successful implementation. To this end, the resources listed below will be provided in support of the proposal in accordance with its implementation schedule.

Institution Co-financing Commitment during Project Implementation (must equal at least 10% of grant requested)

Item	Quantity/Amount	Estimated Cost/Value (Naira)
Staff Time:		
<i>Total</i>		

Date

Section 16: Signatures

Name and signature of Head of Department

Date

**This Proposal has been reviewed and cleared by the Technical Review Committee
(Please attach a completed Proposal Scoring Form to each approved Proposal)**

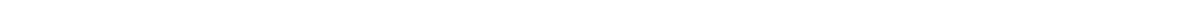
Chairman, TRC

Date



Section 17 Abridged Curricula Vitae

Please attach here the abridged CV's (not more than a page per participant) for all members of the Proposal Implementation Team.



Submission Form for partnership research involving a Private Sector Organisation/ Entrepreneurial Projects

Name of Partnership firm:

Basic Characteristics of the Firm:

Number of Employees:

Main products:

Revenues:

Area of Proposed Collaboration:

Business Plan for Area of Proposed Collaboration (*optional*):

Detailed Description of Project Activities:

Implementation Schedule for Activities:

Budget:

Firm's Contribution toward Cost of Activities:

Expected Benefits from the Collaboration:

Cash Flow and Cost/Benefit Analysis:

Expected Non-Cash Benefits:

Annex B

CRITERIA FOR EVALUATION OF PROPOSALS UNDER COMPONENT 2

PROPOSAL EVALUATION FORM (To be completed by each member of the Technical Review Committee)

Name of institution(s) submitting the proposal:

.....
.....
.....

Title of Grant/Research proposal:

.....
.....
.....
.....

Date of Evaluation: From To

Name and Signature of Member of TRC (Indicate Chairman and Secretary)

- 1.....
.....
- 2.....
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- 3.....
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- 4.....
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- 5.....
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- 6.....
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- 7.....
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CONFIDENTIALITY OF THE REPORT

Information contained in this report is strictly for the use of the National Project Secretariat, STEP-B and its authorized Agents only.



NOTES FOR MEMBERS OF THE TECHNICAL REVIEW COMMITTEE (TRC)
EVALUATING ALL GRANT APPLICATIONS/PROPOSALS

1. Relevant sections of this Form are to be completed by scoring, followed by written comments.
 2. Written comments should be precise and to the point. Additional sheets may be used if space provided in the form is inadequate to make all the important observations being highlighted by the TRC.
 3. Form STEP-B/PEF should be completed by each member of the TRC and should be used to prepare a statement of facts report.
 4. The statement of fact final evaluation report should be jointly discussed and signed by all members of the TRC, with the National Project Coordinator countersigning.
 5. The Statement of Fact report should contain comments and recommendations of the TRC on the proposal evaluated.
 6. The report has eight components viz:
 - i. Technical relevance to local, regional, and/or national needs as defined in the STEP-B report, NEEDS document, Science and Technology Policy, National Policy on Education etc.
 - ii. Adequacy of human and institutional capacity and management including enhanced links with partner institutions and improved research, teaching and learning quality.
 - iii. Demonstration of sound project plan, stating feasibility, sustainability, risk analysis, endurable timeline, result framework and short start-up period.
 - iv. Track record of performance in the area of activity, including a record of cooperation with other institutions.
 - v. Appropriate physical facilities and communication network.
 - vi. Transparent and accountable procurement, financial management, and auditing procedures.
 - vii. Demonstrable benefits outside the realm of the specific institution.
 - viii. Availability of funding from other sources.
-

1. Address Local, Regional, and/or National Needs (e.g.) as defined in the STEP-B Report, National Economic Empowerment and Development Strategies (NEEDS) Document, National Science and Technology Policy and National Policy on Education (NPE) (20 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
Addresses issues highlighted in the STEP-B Project Report	5		
Justification in terms of National Policy Objectives	5		
Regional/local needs	5		
Addressing multiple needs	3		
Clarity and coherence in addressing the Stated Objectives	2		
Total	20		

Written Comments/Justification for Score

.....

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.....

.....

2. Evidence of additional funding and support from other sources (5 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
Demonstrable and satisfactory evidence of additional funding and/or support from other external sources	3		
Evidence of local institutional support i.e. overhead, personnel	2		
Total	5		

Written Comments/Justification for Score

.....

.....

.....

.....

3. Benefits outside the realm of the specific Centre (5 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
Demonstrable accessibility of facilities to other programmes in/outside the institution	3		
Demonstrable and satisfactory evidence of benefit to local community	2		
Total Score	5		

Written Comments/Justification for Score

.....

4. Adequacy of Human and Institutional Capacity and management including enhanced links with partner institutions and improved research teaching and learning quality (20 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
Evidence of high quality research and technical support personnel with appropriate qualification relevant to the activities of the Centre	8		
Evidence of experienced research personnel	3		
Evidence of multi-disciplinary collaboration	3		
Evidence of local and international collaboration	6		
Total Score	20		

Written Comments/Justification for Score

.....

5. Sound project plan demonstrating feasibility, sustainability, risk analysis, endurable timeline, result framework and short start-up period (20 points)

Evaluation Element	Maximum score	IAB Score	TRC Score
The proposal has a detailed work plan, procurement plan, disbursement plan and an M&E plan	10		
There is evidence of risk analysis in the proposal	3		
The proposal requires minimal start-up time	3		
The result (output and outcome) meet the STEP-B Project Development Objectives	4		
Total Score	20		

Written Comments/Justification for Score

.....

6. Track record of performance in the area of the activity, including a record of cooperation with other institutions (10 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
Evidence of published work of research personnel in areas relevant to the activities of the Centre in reputable international journals	5		
Evidence of registered patents and/or technical report to reputable funding organisations	3		
Evidence of joint publications between research personnel and international and local collaborators	2		
Total Score	10		

Written Comments/Justification for Score

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7. Transparent and accountable procurement, financial management, and auditing procedures (6 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
Evidence of existing transparent accounting and financial management procedure	2		
Evidence of sound procurement procedure	2		
Evidence of accountable and transparent management of previous donor fund	2		
Total Score	6		

Written Comments/Justification for Score

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8. Appropriate physical facilities and communication network (10 points)

Evaluation Elements	Maximum score	IAB Score	TRC Score
There is evidence that the institution has the facilities (equipment workshops, laboratories etc) to house the Centre	4		
Evidence of accessibility to library facilities relevant to the Centre's core mandate	3		
The institution has access to internet facilities	3		
Total Score	10		

Written Comments/Justification for Score

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9. Sustainability of CoEx after Expiration of funding (4 points)

Evaluation Element	Maximum Score	IAB Score	TRC Score
There is evidence of financial support to sustain the proposal beyond STEP-B	2		
There is a partnership and collaboration plan with the private sector/professional association	2		
Total Score	4		

Written Comments/Justification for Score

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Annex C

Some Fields of Science and Technology Eligible for Competitive Funding

1. NATURAL SCIENCES

1.1. Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]

1.2. Physical sciences (astronomy and space sciences, physics, other allied subjects)

1.3. Chemical sciences (chemistry, other allied subjects)

1.4. Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)

1.5. Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2. ENGINEERING AND TECHNOLOGY

2.1. Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)

2.1. Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]

2.3. Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialized subdivisions; forest products; applied sciences such as geodesy, industrial chemistry, etc.; the science and technology of food production; specialized technologies of interdisciplinary fields, *e.g.* systems analysis, metallurgy, mining, textile technology and other allied subjects)

3. MEDICAL SCIENCES

3.1. Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)

3.2. Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)

3.3. Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4. AGRICULTURAL SCIENCES

4.1. Agriculture (education, soil science, economics & management, agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)

4.2. Veterinary medicine

5. SOCIAL SCIENCES

5.1. Psychology

5.2. Economics

5.3. Educational sciences (education and training and other allied subjects)

5.4. Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organization and methods, miscellaneous social sciences and interdisciplinary, methodological and historical S&T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences]

Annex D



FEDERAL MINISTRY OF EDUCATION
SCIENCE AND TECHNOLOGY EDUCATION POST BASIC (STEPB) PROJECT
(Cr: 4304-UNI)

INNOVATORS OF TOMORROW
RESEARCH AND TECHNOLOGY DEVELOPMENT GRANT
COMPONENT 1A WINDOW C

APPLICATION FOR RESEARCH GRANT UNDER IOT

Read carefully the Guidelines for general instructions and advice pertaining to specific questions. This form may not be modified from its original format. Note: Maximum budget request is USD 20,000.00 or its equivalence in Naira.

1.0 STUDENT'S BASIC INFORMATION:

Title: Your surname: _____

Sex: Your given name(s): _____

Your name as it will appear on your publications: _____

Date of birth: day: _____ month: _____ year: _____

Nationality: _____

Present Qualification with Grade:

Qualification in view (e.g. Ph.D, MA, MSc, BSc, HND, NCE, ND etc):

Current CGPA (out of 3/4 or 4/5): _____

Name, Telephone No and Qualification of Supervisor:

Institution:

Faculty/College/School:

Department:

Mailing address (P.O. Box):

Your e-mail address:

2.0 CONTACT INFORMATION

3.0 TITLE OF RESEARCH

PROJECT: _____

4.0 PROJECT DESCRIPTION, RELEVANCE AND JUSTIFICATION (in addition, please state if the project is benefiting from joint research effort or other research grants and amount of the grant. Maximum of 250 words).

5.0 STATE THE EXPECTED OUTPUTS OF THE PROJECT (NOT MORE THAN 5 IN BULLETS)

6.0 TIME SCHEDULE FOR YOUR RESEARCH PROJECT

Starting Date _____ / _____
(month/year)

How long will your IOT project last? _____
months

Activity (for example, questionnaire surveys)	Duration of Activity (for example: Month 2-5)	Objectives/targets	Cost

Detailed Work Plan

7.0 PROCUREMENT PLAN WHERE APPROPRIATE (Please note that institutional overheads/charges are not accepted)

S/No	Items to be procured	Budget ₦	Procurement Method (Shopping or Contract)	Specifications	Quantity	Unit Cost	Total Cost	Actual Cost	Remarks

Applicant's signature: _____

Date: _____

8.0 INSTITUTIONAL ENDORSEMENT:

Research Supervisor's Endorsement: I affirm that the student is competent and can complete his/her study plan on schedule provided the above stated research fund is approved and released:

Research Supervisor's name and signature:

I, the Head of Department of _____ declare:

- that the above named Applicant is a student of this Department and all the information provided by the applicant is correct.

Name and signature of the Head of Department:

Date: _____

I, the Project Manager, STEP-B of this institution confirm:

- that I have read this Application in its entirety;
- that the research topic conforms with the Project Development Objectives (PDO) of STEP-B;
- that the application has been duly completed

Name and signature of Project Manager:

I, the Head of this institution declare:

- that the Institution supports this application and will make approved resources under the grant available to the Applicant for the duration of the project

Name, title and official position:

(Please type)

Head of Institution's signature:

Date:

Stamp or seal: _____(Please type)

More information is available on the Internet at: www.stepbnigeria.org

Annex E
Evaluation Criteria/Institutional Scoring Matrix for IOT Grant

i.	Academic qualification in view	
	a. PhD	35%
	b. Research Masters	30%
	c. MSc	25%
	d. Bsc/HND	20%
	e. Others	15%
ii.	Class of Qualifications Earned/CGPA	
	a. First class/Distinction	25%
	b. Second Class Upper/Upper Credit/Credit	20%
	c. Second class lower/Lower Credit/Merit	10%
iii.	Female applicants	10%
iv.	Age:	
	a. Below 30	10%
	b. 31 – 39	8%
	c. 40 - 45	5%
	d. Above 45	2%
v.	Institutional Partnership:	10%
vi.	Duration of grant period applied for:	
	a. Conclude within a year	10%
	b. 1 – 2 years	8%
	c. 2 – 4 years	5%
	d. Over 4 years	0%

Recommended pass marks are as follows:

1.	Doctorate students:	70%
2.	Research Masters	65%
3.	Masters students:	60%
4.	Bachelor/HND students:	55%
5.	NCE/ND	50%

What can the grant be used for?

- i. Procurement of goods, chemicals and equipment³: This can include books, instructional materials, renovation, journal publication⁴ and upgrading of facilities/equipment etc
- ii. Consultancies: This can include studies, capacity building and enhancement (training, study tour, exchange programme, fellowship)
- iii. Operational cost to include imprest, travel, photocopy etc.

³ All equipment procured belong to the institution and must be engraved

⁴ The STEP-B project should be acknowledged in all publications arising from the sponsored research



SCIENCE AND TECHNOLOGY EDUCATION POST BASIC (STEPB) PROJECT (Cr:
4304-UNI)

*INNOVATORS OF TOMORROW RESEARCH AND TECHNOLOGY DEVELOPMENT
GRANT*

COMPONENT 1A WINDOW C

FORMAT FOR SUBMISSION OF RECOMMENDED IOT APPLICATIONS BY
INSTITUTIONS

NAME OF INSTITUTION:

S/N	NAMES OF STUDENT WITH SEX	NAME OF SUPERVISOR WITH PHONE	TITLE OF RESEARCH PROJECT	DATE OF ENROLMENT	EXPECTED DATE OF COMPLETION WITHOUT STEP-B SUPPORT	EXPECTED DATE OF COMPLETION WITH STEP-B SUPPORT	AMOUNT REQUIRED FROM STEP-B	SPECIFIC RECOMMENDATION OF THE PM

NAME AND SIGNATURE OF PROJECT MANAGER (PM):

_____ Date: _____

NAME AND SIGNATURE OF HEAD OF
INSTITUTION: _____

Date: _____

OFFICIAL STAMP OR SEAL OF THE INSTITUTION

Implementation Matrices

A proposal may consist of one or more activities and each activity will be executed through a number of sub-activities. Each activity may have a number of sequential steps to be executed. Each step will likely require a number of inputs (means). Most of these means have cost implications.

The following two tables will help in formulating the STEPB grants proposal;

Matrix 1 should be part of the submitted proposal.

Matrix 2 could also be part of the submitted proposal or it may simply be used as a tool to develop Matrix 1. It will be very useful for providing the information needed for illustrating how well the proposal complies with the list of requirements in the preparation guide (such as those in the 'essential' and 'desirable' lists). In this respect, it often emerges that a proposal may have 'spin-off' benefits that are not always obvious if it has not been thought through in detail. Two such 'spin-off' benefits in the example given below (S&T teacher INSET) are the creation of a cadre of lead teachers with a training capacity and the development of desktop publishing skills by materials developers. Such additional benefits should be noted in the proposal.

In the example developed to show how Matrix 2 is used **it is be clear that the component has more cost elements (some quite considerable) in it than might be initially obvious.** This kind of breakdown exercise is important to arrive at a realistic sub-component cost.

Implementation matrix 1

This example matrix shows the whole proposal at a glance.

Sub-project: _____

Activity	Sub-Activities	Responsibility ⁵	Year ⁶ -			Cost elements ⁷	Cost from loan fund ⁸	Cost from other sources ⁹	Indicators ¹⁰	Risks and assumptions
			1	2	3					
Activity one one sentence description	Sub - Activity 1.1 ¹¹ one sentence description					element A				
						element B				
	Sub - Activity 1.2 one sentence description									
	Sub-Activity 1.3 - etc									
Activity2 one sentence description	Sub-Activity 2.1 - etc					etc				
Etc										

Total funding required _____

Total from World Bank funds _____ (%)

⁵ It is useful to assign a position to this such as 'HoD Chemistry' - the position directly responsible for implementation

⁶ Indicate in which year the activity will be taking place

⁷ There will be several cost elements - briefly describe them – e.g., 'ICT hardware', 'TA', 'Training workshops'

⁸ This indicates the funding from the World Bank STEPB funds

⁹ This indicates the total funding from other sources (include office costs, salaries, etc). State the source.

¹⁰ Indicators usually refer to the whole component, not individual activities. They should be readily measurable and should indicate what level of the variable is acceptable – e.g., "20% (example) increase in number of females graduating" is better than "increase in number of females graduating"

¹¹ For more details of what constitutes and activity, see the next matrix

Implementation matrix 2 – Activities

This matrix may help with designing and costing activities. It divides the activity up into each step. Each step should be considered even if it may have no obvious cost, because it may take time and hence may influence what can reasonably be done in the year. Also required is the means (what is needed) for carrying out each step. These will usually have a cost and this should eventually figure in the cost columns in Matrix 1 above

Component 2

Activities	Means and steps	Responsibility	Year ‘ - insert the cost of each step for each year			Cost from loan fund	Cost from other sources
			1	2	3		
Activity 2.1 one sentence description	Step 1 one sentence description						
	Step 2 Etc						
	Step 3						
	Step 4						
	Step 5 etc						
Activity2.2 one sentence description	Step 1						
	Step 2						
	Step 3 etc						
Activity 2.3 – etc	Etc						

Example

Grant: To provide a long-term in-service assistance program to senior S&T teachers in the region around the HEI.

In this example, the sub-project is divided into four activities. Activity 2 in this list is used to show how an activity consists of a sequence of sub-activities, each of which will proceed by a series of steps. What is needed (the means) to carry out each step can then be identified

- Activity 1 Identification of the needs of the teachers
- Activity 2 Develop and pilot the INSET program
- Activity 3 Evaluate the pilot
- Activity 4 Revise and take to scale

Activity 2

Activity 2.1

Activity 2.2

Every activity should be expanded into means and steps which should go into Matrix 2

Activities 2.1 to 2.4 in the list above might be carried out using the following steps and means

Activity 2.1

Steps

Means (what is needed to achieve the step)

Activity 2.2

Steps

Means (what is needed to achieve the step)

Activity 2.3

Steps

Means (what is needed to achieve the step)

Activity 2.4 Train trainers

Steps

Means (what is needed to achieve the step)

Activity 2.5 Etc



Annex H

Standardized Actual Costs for Proposal Budget Calculation

Arriving at a realistic overall cost of a subject - particularly one that involves a mass of small costs like training - is often not a simple matter. Each submission will require checking to ensure that the estimates are realistic and that too, can be just as difficult.

To simplify all these processes, the cost estimates for each submission should perhaps be submitted on a standardized (preformatted) Excel spreadsheet template. This would allow all the unit costs used by each submission to be clearly identified in an initial list and individual ones could be altered if it is felt that they were incorrect without having to rewrite the whole submission.

Developing such a template would also help in project preparation because a number of common unit costs could be worked out beforehand and used across all proposals. These would also assist with developing internal budget lines to enhance clarity in individual sub-project accounting.

The table shows a number of unit costs¹²

Item	Cost (=N=)
Cost of Departmental or Faculty BUS for conveying students	5,080,000.00
Annual running costs of a small Departmental BUS (fuel + maintenance)	889,000.00
Annual running costs of a 4x4 vehicle (fuel + maintenance)	1,270,000.00
Per capita national workshop/meeting cost (4 days transport, DSA, venue, etc)	190,500.00
Per capita regional workshop/meeting cost (4 days transport, DSA, venue, etc)	63,500.00
Internal TA (per week)	127,000.00
External TA (per week)	444,500.00
External TA DSA/week	311,150.00
Return flight Europe	190,500.00
Per capita/per day study visit Europe/USA/Southern Africa	254,000.00
Printing and publishing - per 1000 pages	9,525.00
Serviced office space /person/year (important for calculating institutional contributions)	
Secretarial services /person/month	
Computer + standard peripherals and software	203,200.00
ETC	

It is unlikely that all institutions applying for sub-project funding will have experience in using a spreadsheet template. In such cases, it will greatly expedite the rapid assessment of sub-project applications if all could be persuaded to follow the same procedure for estimating costs.

¹² The costs here are taken from a 2005 Nigerian Project and are provided as examples only

Annex: I

STRATEGY FOR SELECTING EMERGING CENTRES OF EXCELLENCE UNDER COMPONENT 2

1.0 PREAMBLE

Support for the Emergence of Centres of Excellence (CoEx) falls under component 2 of the Science and Technology Education Post Basic (STEP-B) Project. Under this component, the project has set aside \$54 million to be disbursed to nine distinct institutions at a maximum of \$7 million each. The funds are meant to support the activities of the recipient institutions towards making them international CoEx.

In pursuance of this component, the National Project Steering Committee established a 20 Man Committee to define areas of national priority in science and technology as well the strategy for the administration of the funds.

The committee worked from July – September, 2008 and submitted its report. However the NPSC set up an Ad hoc committee to review the report and make submission to it. The two reports are attached as appendices I & II. This blueprint represents a harmonized report of the committees to guide the implementation of this component.

2.0 DEFINITION OF CENTRES OF EXCELLENCE

An advanced research or teaching programme, a higher education institution, a network of programmes or institutions, that is deemed by merit review to be of the highest quality in human resource capacity, infrastructure and output.

3.0 IDENTIFICATION OF AREAS OF NATIONAL PRIORITY

Areas of national priority identified under section 16 above are those in which innovative research will make immediate and sustained impact on national socio-economic development. In all these areas, human capacity development and private sector participation have been identified as essential components.

4.0 GENERAL PRINCIPLES FOR SELECTION

4.1 Adherence to Merit in Selection

Merit should be strictly adhered to in selecting the Centres of Excellence subject to the strategies on spread mentioned below:

4.2 Geopolitical Spread

Geopolitical spread in the location the Centres of Excellence should be considered. The committee recommends that each geopolitical zone in the country should have at least one but not more than two Centres of Excellence

4.3 Monitoring and Evaluation

All Centres of Excellence should be regularly monitored in line with the monitoring and evaluation plan of the NPS. The head of the institution where Centres of Excellence is located will be the principal accounting officer and in the case of multi-organization involvement, one organization will be designated as principal partner and its head becomes the principal accounting officer.

4.4 Guidelines for funds Utilization

The following are the recommended guidelines for utilization of the funds allocated. The NPS recommends the following formula for each Centre of Excellence to serve as a guide on maximum spending limits for the various expenditure sub-head items:

- Infrastructure 10%
- Equipment and Materials 50%
- Postgraduate Development 10%
- Transport and Travelling including
Conference attendance 10%
- ICT equipment and training 5%
- Operating cost 5%
- Maintenance and miscellaneous expenditure 5%
- Consultancy services 5%

4.5 Disbursement of Funds

It is essential to have guidelines for fund draw-down. Lack of these or the knowledge of them by some of our institutions has led to the failure of many donor-assisted projects in the past. Therefore, the processes that initial fund draw-down should not be more than 50%, and subsequently 25%. This could be modified where purchase of major equipment is involved.

4.6 Sustainability

For sustainability of the Centres of Excellence, the following are considered essential and, thus, proposed:

Internal bodies like ETF, PTFD, NACCIMA, MAN, DBI, National Mathematical Centre (MAN), STAN, CIB etc should be made to participate fully from the start as well as the survival of the project long after the funds dry up. A number of projects have failed in the past because of restriction of donor funds to non capital expenditure and failure of beneficiaries to erect the appropriate infrastructure. Accordingly, the following are recommended:

- Where found necessary, contributions for capital projects in some of the Centres of Excellence could be made right away subject to appropriate application and approval;
- The bodies should, based on a well designed programme, phase in their support for the centres.

4.7 Written Position Papers

- Each selected Centres of Excellence should have written:
 - i) Aims and objectives of the centre;
 - ii) Strategies for achieving them;
 - iii) Targeted achievements.

4.8 Periodic Performance Analysis

There must also be an assessment of the output of each centre and ensure adherence with its aims and objectives and current national needs.

4.9 Centres of Excellence Management Committee

Each selected Centre of Excellence must hold regular management committee to ensure that all stakeholders are carried along in the realization of the centre's vision.

4.10 Institutional Spread

In selecting the Centres of Excellence, institutional spread should be ensured. That is, the Universities, COEs, Polytechnics and specialized institutions must be included, in this spread, in addition to zonal spread. A multi-organizational involvement in a Centre of Excellence should be encouraged, especially if qualified and adjacent to each other.

4.11 Common Denominators

The committee identified the following major strategies as common denominators in all Centres of Excellence:

- Ensure full private sector involvement with the mutually beneficial relationship; and
- Postgraduate education plan and implementation strategies

5.0 Concluding Remarks

The above blueprint will be implemented by the NPS in collaboration with the TRC and the IAB. Two bodies which have already been put in place by the NPS.
