Committee on Development and Intellectual Property (CDIP)

Thirteenth Session
Geneva, May 19 to 23, 2014

CAPACITY-BUILDING IN THE USE OF APPROPRIATE TECHNOLOGY SPECIFIC TECHNICAL AND SCIENTIFIC INFORMATION AS A SOLUTION FOR IDENTIFIED DEVELOPMENT CHALLENGES – PHASE II

prepared by the Secretariat

1. The Annex to this document, containing a project proposal on “Capacity-Building in the Use of Appropriate Technology Specific Technical and Scientific Information as a Solution for Identified Development Challenges – Phase II” addresses Development Agenda Recommendations 19, 30, and 31. The estimated cost for the project amounts to 467,792 Swiss francs of which 200,000 Swiss francs related to non-personnel costs and 267,792 Swiss francs related to the personnel costs.

2. The CDIP is invited to consider and approve the Annex to this document.

[Annex follows]
### 1. SUMMARY

<table>
<thead>
<tr>
<th><strong>Project Code</strong></th>
<th>DA_19_30_31_03</th>
</tr>
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<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Capacity Building in the Use of Appropriate Technology Specific Technical and Scientific Information as a Solution for Identified Development Challenges – Phase II</td>
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</table>
| **Development Agenda Recommendation(s)** | Recommendation 19: To initiate discussions on how, within WIPO’s mandate, to further facilitate access to knowledge and technology for developing countries and LDCs to foster creativity and innovation and to strengthen such existing activities within WIPO.  
Recommendation 30: WIPO should cooperate with other intergovernmental organizations to provide developing countries and Least Developed Countries (LDCs) upon request, advice on how to gain access to and make use of IP-related information on technology, particularly in areas of special interest to the requesting parties.  
Recommendation 31: To undertake initiatives agreed by member States, which contribute to transfer of technology to developing countries, such as requesting WIPO to facilitate better access to publicly available patent information. |
<p>| <strong>Brief Description of Project</strong> | During its third and fourth sessions, the Committee on Development and Intellectual Property (CDIP) discussed the proposal by the Republic of Korea on “Use of Patent Information in the Transfer of Appropriate Technologies”, as contained in the document CDIP/3/7, and the proposal on “Developing Tools for Access to Patent Information” (document CDIP/4/6). Phase I of the project was prepared and implemented on the basis of the above proposals and was independently evaluated. The evaluation report for Phase I was considered by the Committee on Development and Intellectual Property at its twelfth session, held in November 2013. In this context, Phase I of the project received overwhelming support from Member States and consequently, approval was given by the CDIP for the extension of the project to a Phase II. The CDIP also requested that the recommendations given in the evaluation report should be included in the revised project document. Building on Phase I of the project, this document has been prepared in response to the evaluation and comments made on the implementation of Phase I of the Project. |
| <strong>Implementing Program(s)</strong> | Program 9 |</p>
<table>
<thead>
<tr>
<th>Links to other related Program(s)/ DA Project(s)</th>
<th>Innovation and Technology Sector and Global Issues Sector. Links to WIPO Programs 1, 9, 14 and 18.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links to Expected Results in the Program and Budget</td>
<td><strong>Strategic Goal III, Program 9:</strong> Expected Result: Enhanced human resource capacities able to deal with the broad range of requirements for the effective use of IP for development in developing countries, LDCs and countries with economies in transition.</td>
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<tr>
<td>Project Duration</td>
<td>36 months</td>
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</table>
| Project Budget | Non-personnel costs: 200,000 Swiss francs  
Personnel costs: 267,792 Swiss francs |
2. PROJECT DESCRIPTION

2.1. Results of Phase I

Background

Knowledge and technology can be used as a tool to combat poverty because of the contribution they can make to sustained economic growth and development, enhanced market efficiency and the creation of employment opportunities. In this context, the application of scientific and technical information and knowledge in industry, trade, agriculture, health, education and services is critical. Building technical and scientific skills and capacity that will allow Least Developed Countries to apply knowledge and technology to meet their social and economic challenges requires the participation of a range of players from individuals to institutions, including inventors, creators, research and development (R&D) centers, academic institutions, manufacturing enterprises, agricultural organizations and health services. Regulatory, legal and administrative policies have an influence on these players and on their interactions, which in turn determine how knowledge, technology and resources flow among them.

During its third and fourth sessions, the Committee on Development and Intellectual Property (CDIP) discussed the proposal by the Republic of Korea on “Use of Patent Information in the Transfer of Appropriate Technologies”, as contained in the document CDIP/3/7 and the proposal on “Developing Tools for Access to Patent Information” (document CDIP/4/6). Both proposals considered that patent information is an under-utilized resource that could be better exploited, particularly in the areas of public policy and development and suggested that the specific technologies or topics to be studied should be identified in consultation with Member States, relevant IGOs and NGOs, to ensure that the activities are demand-driven and respond to a real need for specific information. Both documents identify critical areas of development such as food and agriculture, health and the environment. The use of scientific and IP-related technical information can help increase food production, for example through better soil management, efficient irrigation and the cultivation of high-yield crops with enhanced nutrition value. It can also play a pivotal role in meeting health-related development objectives.

The Purpose of the AT Project

In light of the above, the primary purpose of this project is to contribute to the national capacity of LDCs to improve the management, administration and utilization of technical and scientific information with a view to building their appropriate technology base and meeting national growth and development goals through knowledge transfer and capacity building, taking into account social, cultural and gender implications of the use of technology through joint interaction with a national expert group and focal organizations.

The Scope of the AT Project

This project will cover three LDC countries. Given that the project is limited in resources and in duration, it does not seek to provide assistance in every area of the above sectors but only in specific, nationally identified need areas. It is envisaged that the delivery of an appropriate output for a particular sector in a specific need area in a given country will be an effective way to assist governments and national development agencies, communities as well as individuals in their efforts to use scientific and related technical information for development.
Implementation of Phase I of the AT Project

The Phase One of the project was successfully implemented in three countries namely Bangladesh, Nepal and Zambia from July 2010 to April 2013, as per the project document.

Summary of Achievements of Phase I of the AT Project:

(a) Three countries were selected, namely Bangladesh, Nepal and Zambia, on the basis of requests received and participated in the project.

(b) National Expert Groups (NEGs) were fruitfully established in all the three countries. NEGs included 11 members in Bangladesh, 9 members in Nepal and 11 members in Zambia.

(c) Two areas of development needs were identified in each of the three countries.

(d) Six patent search requests were prepared by the national experts. The search requests contained analysis of the scope and nature of the needs in order to assist WIPO in the identification of the most relevant patent documents.

(e) Six patent search reports were prepared by WIPO. The search reports provided a detailed picture of the technical solutions available in the patent system. Each report provided 10 to 20 possible technologies that could address the identified need areas.

(f) Six landscape reports were prepared by the national experts. The landscape report gave detailed analysis of the technologies provided in the search reports that led to propose the most relevant appropriate technology for each of the identified needs.

(g) Six business plans were prepared and approved by the NEGs. The business plans described how best the technologies could be implemented and commercialized.

(h) A number of Expert Groups meetings and two multi-stakeholder forums were held in each of the three countries. During those forums, general information was provided to the stakeholders on the project and the progress made.

Evaluation of the Phase I of the AT Project

Upon completion of the project in April 2013, an independent evaluation was undertaken from June to September, 2013. The purpose of the evaluation was to provide an opportunity for learning from the implementation of Phase I, i.e. what worked well or did not work so well, and make recommendations for improvement in future projects implementation. The evaluation was in charge of assessing the project design framework; the project management including monitoring and reporting tools; as well as measuring and reporting on the results achieved to date (project effectiveness) and assessing the likelihood of sustainability of the achieved results. The evaluation made the following key recommendations:

1. That the CDIP approves Phase II of the project. In so doing, the CDIP was invited to consider:

   (a) Supporting the three pilot countries to implement their business plans.

   (b) Expanding the project to new participants from LDCs.
2. To improve the project implementation, the project document should be modified by the WIPO Secretariat, to address the following:

(a) **Selection of the participating countries:** provide clear and comprehensive selection criteria to make the project more demand-driven, relevant and sustainable.

(b) **Partnership agreement:** Introduce partnership agreement or MoU to clarify the roles and obligations of the participating countries and WIPO.

(c) **Identification of areas of needs:** Prepare guidelines on how best the process of identification should be undertaken to ensure; consultation, prioritization, ownership and proper documentation of the process.

(d) **National Expert Group:** Prepare guidelines outlining; selection criteria, composition, terms of reference, chair, allowances and incentives, coordination and legal status.

(i) **Implementation of the business plans:** Should be a mandatory part of the project and must be negotiated in the partnership agreement.

(j) **Project duration** – The two years provided for the project should be maintained and be used efficiently.

(k) **Project areas:** The project’s focus areas identified by WIPO (environment, health agriculture, energy and industries) should be expanded.

3. To enhance Capacity Building, WIPO Secretariat should review the arrangement for search and preparation of landscape reports as follows:

(a) Undertake search at WIPO and allow for the participation of the national experts in the patent search to acquire the necessary skills.

(b) Provide opportunity for face-to-face interaction between the national experts, international consultant and WIPO experts during the preparation of the landscape reports.

4. To enhance sustainability, it is recommended that WIPO Secretariat ensures the following:

(a) The implementation of the business plans should be part of the Partnership Agreement.

(b) More resources should be put in WIPO's Division for Least Developed Countries for the administration of the project and to support capacity building of Member States.

(c) Use of the Appropriate Technology should be mainstreamed in the national IP strategies of the participating countries.

(d) National Expert Groups and National Multi-Stakeholders Group should be made permanent organs of these countries.
Phase II of the AT Project

This project received overwhelming support from the Committee on Development and Intellectual Property (CDIP) in its twelfth session that was held from November 18 to November 22, 2013 in Geneva. Consequently approval was given for extension of the project to Phase II. The CDIP also requested that the recommendations given in the evaluation report should be included in the project document of Phase Two.

Purpose and Coverage of Phase II of the AT Project

This document has been prepared in response to the evaluation and comments made by Member States on the implementation of Phase I of the Appropriate Technology Project. The document covers the following issues:

(a) **Project Delivery Strategy** – to explain the steps of implementing the Appropriate Technology Project.

(b) **Selection of the participating countries**: To provide clear and comprehensive selection criteria to make the project more demand-driven, relevant and sustainable.

(c) **Partnership Agreement**: To introduce partnership agreement or MoU to clarify the roles and obligations of the participating countries and WIPO.

(d) **Identification of areas of needs**: To prepare guidelines on how best the process of identification should be undertaken to ensure consultation, prioritization, ownership and proper documentation of the process.

(e) **National Expert Group**: To prepare guidelines outlining selection criteria, composition, terms of reference, chair, allowances and incentives, coordination and legal status.

(f) **Sustainability**: To provide indicators of sustainability that should guide the implementers towards the project’s sustainability.

(g) **Capacity building**: To provide guidelines on how best the project should be implemented to enhance capacity building for patent search, preparation of patent reports, landscape and business plans.

(h) **Monitoring and Evaluation**: To provide guidelines on what to consider in monitoring and evaluation and how to get the best out of it.

(i) **Project Duration**: To provide suggestions on appropriate project duration.

(j) **Project areas**: To propose how the project areas can be expanded.

(k) **Information Exchange and Dissemination**: To propose how the results of Appropriate Technology Projects can be disseminated for use by other Member States.

(l) **Collaboration with other stakeholders**: To identify and recommend departments that can play a significant role in the implementation of the program.
### 2.2. Objectives of Phase II

#### The Overall and Specific Objectives of the AT Project

The overall objective of the project is thus to contribute to the economic, social, cultural and technology development of the beneficiary countries and, ultimately, to alleviate poverty. The specific objectives of the project are:

- **(a)** To facilitate greater use of appropriate technical and scientific information in addressing nationally identified needs for the achievement of the development goals;
- **(b)** To build national institutional capacity in the use of technical and scientific information for identified needs; and
- **(c)** To coordinate the retrieval of appropriate technical and scientific information and provide appropriate know-how in those technical areas to implement this technology in a practical and effective manner.

### 2.3. Delivery Strategy for Phase II

As this project addresses the development problems of LDCs on the basis of identified need areas in accordance to the national development plan, the implementation strategy takes into account initiatives by all partners of the project. The focus will be addressing the solution to the development problem by taking into account the national development plan, institutional values and contribute to poverty alleviation. One should be able to see the connection between the project and the medium and long-term development plans of the countries involved and address immediate problems and most important need areas. Without setting clear priorities the implementation process will be difficult. There is a need to master the factors that condition technical change to mobilize policymakers through capacity building to support the national expert group with the purpose of addressing the development challenges. One must be able to assess situations quickly and accurately, to maximize project resources and minimize project implementation risks and create the positive environment.

The following chain of events in the delivery of the Second Phase, from the initiation of the project to its completion, is suggested.

#### Chain of Events in the Implementation of the Appropriate Technology Project

1. **Application**: A Least Developed Country prepares and submits to WIPO Secretariat an application expressing interest to participate in the Appropriate Technology Project.

2. **Review of Application**: WIPO reviews the application and decides whether or not to approve it. If not approved, WIPO clarifies areas that should be improved by the country concerned.

3. **Participation Agreement**: Where the application is approved, the country concerned and WIPO will sign a participation Agreement clarifying the obligations of each Party.

4. **Establishing a National Expert Group (NEG)**: WIPO will coordinate the establishment of a national Multi Stakeholder and Expert Groups (NEG) comprising representatives from the government, business, industry, university, relevant IGOs, NGOs, research and development institutions to coordinate project implementation.
5. **Chair of NEG**: appoint Chair of Multi Stakeholder Group and NEG amongst the Members.

6. **National and International Experts**: appoint National and International Experts that will spearhead the day to day implementation of the project.

7. **Needs Areas**: WIPO will support each NEG to identify several needs areas and prioritize one or two need areas.

8. **Prepare Search Request**: prepare a Report that can clarify the technology required. It should be prepared in a manner that would allow anybody reading the request to be able to provide the relevant information required.

9. **Prepare Search Report**: to prepare the finding of Patent Information Search undertaken for the identified project.

10. **Formulate TOR for a Technology Landscape Report**: each NEG will receive support from WIPO to formulate Terms of Reference for preparation of the Appropriate Technology Landscape Report.

11. **Prepare a Technology Landscape Report**: prepare a Technical Landscape Report using patent and other scientific and technical information presented in the Search Report to identify the most relevant appropriate technology on the basis of identified needs, and any other information obtained from organization, institutions and departments working on these areas of development.

12. **Approve the Technology Landscape Report**: present the prepared Technology Landscape Report and present the Report to a multi stakeholder forum for discussion and approval.

13. **Business Plan**: prepare a business plan for the implementation of the appropriate technology identified in the Technology Landscape Report and to convert the identified technology into business.

14. **Outreach Program**: develop and organize a national outreach program within the business plan.

15. **External Evaluation**: after the project's completion, an independent evaluation will assess its achievements, lessons learned and sustainability.

**Selection of Participating Least Developed Countries (LDCs)**

This section seeks to answer the following questions: Which Least Developed Country can participate in the Appropriate Technology Project? How should the interested LDC know about the project? How should they express their interest and what should they pay attention to during the application?

**Guidelines**

(a) Least Developed Countries that meet the selection criteria can participate in the appropriate technology project;

(b) Countries seeking to participate must submit expression of interest in writing a letter and by completing the applications. Such applications will be submitted in a prescribed application form (see Appendix);
(c) The purpose and the use of the application form is to standardize the process, make it easier for the Least Developed Country to apply and for the Project manager to evaluate the applications;

(d) The expression of interest will be addressed to the Director, Division for Least Developed Countries;

(e) The application form will be available on the WIPO Website and the application will be done online;

(f) The application will be submitted by the WIPO focal point or contact office in the member states, for example the IP offices.

The following Key evaluation points for the application are proposed:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluation Indicators</th>
<th>Maximum Point</th>
</tr>
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<tbody>
<tr>
<td>1 Need areas</td>
<td>It is proposed that the applicants should give about 5 need areas. At this stage of application, what is required is to clearly describe each project, indicating the name of the project, the problem it will be addressing and the target beneficiaries.</td>
<td>20</td>
</tr>
<tr>
<td>2 Relevancy</td>
<td>Strong linkage of the proposed project to the national development agenda. The evidence for this is where the project is mentioned in a national policy or strategy or sectoral policies or strategies.</td>
<td>20</td>
</tr>
<tr>
<td>3 Focal Point</td>
<td>Clear indication of the ministry or department that will be in charge of overseeing the implementation of the project. Lack of clear focal point was one of the risks identified in Phase One of this project.</td>
<td>15</td>
</tr>
<tr>
<td>4 Experts</td>
<td>Existence of stakeholders working in similar areas will make a pool from which members of National Expert Group can be drawn.</td>
<td>10</td>
</tr>
<tr>
<td>5 Budget</td>
<td>Presence of a budget to implement the project is a strong point of the seriousness with which the project is taken by the government.</td>
<td>20</td>
</tr>
<tr>
<td>6 Timeliness</td>
<td>Presence of timeframe for implementation gives indication of the urgency with which the project is looked.</td>
<td>10</td>
</tr>
<tr>
<td>7 Staffing</td>
<td>Presence of possible staff dedicated to the project is important for setting up the secretariat to oversee the implementation of the project.</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
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</table>
Partnership Agreement

Guidelines

For the selected countries, a Partnership Agreement will be signed with WIPO before the beginning of the project. The partnership agreement will clearly define the obligations of each of the parties as well as expectations.

Proposed obligations of WIPO

In this Appropriate Technology Project, the obligations of WIPO will be as follows:

(a) Advise the selected Least Developed Country on the establishment of National Expert Group;
(b) Recruit and fund national and international experts;
(c) Review the search requests from NEG;
(d) Support the national experts to participate in patent search in WIPO and the preparation of search reports;
(e) Support the national expert and NEG to prepare landscape report;
(f) Support the national expert and NEG to prepare Business plan;
(g) Support the organization of awareness workshops and capacity building; and
(h) Help to link the Least Developed Country with other UN Agencies and other relevant organizations to support implementation.

The obligations of Least Developed Countries will be as follows:

(a) Apply for participation in the project and provide as much information as possible to support the evaluation process;
(b) Identify members to participate in NEG;
(c) Fund the operations of the national secretariat for the project, and the coordination of the activities of NEG;
(d) Pay the support staff of the national Secretariat of the project and NEG;
(e) Mobilize resources for the implementation of the business plan;
(f) Ensure that the implementation is in schedule and as per the workplan; and
(g) Make efforts to publicize the project and secure support for it from other relevant stakeholders in the Country.
Functions, Membership and Establishment of the National Expert Group (NEG)

Guidelines

Functions of NEG

(a) Identify the project relevant to the country’s development for which appropriate technology is required;
(b) Oversee the preparation of the search requests by the national expert;
(c) Oversee the preparation of landscape report;
(d) Oversee the preparation of business plans for the identified technology;
(e) Establish a monitoring and evaluation mechanism to assess the implementation of the project and the achievement of project objectives; and
(f) Develop and organize a national outreach program within the business plan.

Membership of NEG

The membership of NEG should provide a mix of expertise and experience to effectively deliver the above mentioned functions. Therefore the membership should include representatives from:

(a) IP Office;
(b) R&D Institutions and Universities;
(c) Business and Industry Community;
(d) Finance;
(e) Regulatory authority;
(f) IP lawyers; and
(g) Potential users of the technology.

Appointments

(a) The appointment of NEG should be formalized whether it is a permanent or ad hoc committee;
(b) The Chairman of NEG should be a respected and experienced member of the stakeholders with a strong background of IP and technology management; and
(c) The National Expert should act like the CEO of NEG. In no case should the national expert serve as chairman of NEG.

Meetings

(a) The National Expert Group should meet at least 4 times a year. At the start of the year, NEG may have several meetings just like a new board starting up the operation of a new company;
(b) The first meeting will normally be for inauguration of NEG. Parallel to this meeting could be a launch meeting where several other stakeholders would be invited and sensitized on the role and implementation procedures of the project;

(c) The second meeting will be required for NEG to deliberate on the need areas and prioritize one or two. In the same meeting NEG could prepare terms of reference and work plan for the development of the Technology Landscape Report;

(d) In the third meeting NEG will receive, discuss and approve the Technology Landscape Report;

(e) In the fourth meeting NEG would discuss and approve the Business Plans; and

(f) In between meetings NEG can organize sensitization meetings with various stakeholders and organize capacity building workshops.

### Project Areas

**Guidelines for the selection of project areas**

There should be no restriction in the area that the project should cover. This should be determined by the priority sectors that individual LDCs have identified in their respective strategic plans. The following steps may be followed to help build consensus on the identification of needs areas:

1. Stakeholders propose several priority areas.
2. Small team is mandated to reduce the priority areas to 3-5 based on pre-agreed criteria such as relevancy, importance, impact and available resources.
3. The team presents their suggestions to a wider multi-stakeholders meeting, which reduces the number to two.

This selection criterion is aimed at selecting areas that have wider support, building consensus and ownership and promoting deeper awareness of the project.

### Identification of the Priority Needs Areas

**Factors to consider**

1. The project or need areas identified in the national development plan or development blueprint;
2. The project has been identified by stakeholders or a region for its importance;
3. The project has high chances that it will be implemented;
4. The project will benefit large number of people if implemented;
5. There is a local capacity to support the implementation of the project;
6. The target beneficiary are identifiable;
7. The beneficiaries are keen to have the project;

1 The process of identification of the need areas should be all inclusive. It is assumed that the entity applying will have given five need areas and the purpose of the stakeholder meeting will be to discuss them, prioritize and build consensus. Key in this process will be ownership.
8. The government has set aside money for implementation; 
9. There is possibility of replication; and 
10. The technology required is not available in the country. 

Examples of Need Areas Identified in Phase I:

1. Stand-alone solar water distillation system to enhance access to clean drinking water. The project sought an appropriate technology for drinking water purification to facilitate access to clean drinking water in Zambia. The technology needed to be simple, low-cost and easily replicable.

2. Post-harvest drying of cardamom to improve the living conditions of small farmers and marginalized communities through income generation. The project sought a technology (methods, process and equipment) for drying of Cardamom that could preserve the natural purple color and produce high quality Cardamom, capable of fetching higher prices in the international market and consequently improve on the incomes of small scale farmers in Nepal. The search report provided 10 possible technologies from which two were selected.

3. Advanced ground improvement technique by cement and lime treatment for soft, low lying and marshy land. This project sought a technology to strengthen the soft, low lying and marshy land of Bangladesh to make it possible to construct more reliable, stable, durable and safe roads. The search provided 15 technologies from which NEG shortlisted two.

Collaboration with Others

In Phase II of the AT Project WIPO will work closely with Organizations that were involved in Phase I of the project and with additional Organizations based on the needs identified. Experience from the implementation of the first phase of the project showed that capacity in Least Developed Countries can be improved and strengthened when organizations, donors and other related agencies collaborate. In particular, WIPO will continue its cooperation and coordination with UNIDO, WTO, ITC, UNEP, OECD, UNU, other relevant institutions of the United Nations system, organizations and donor agencies, as well as with regional and sub-regional groupings. This cooperation and coordination should aim to fully utilize existing capacities, create more synergies. It should also lead to a systematic exchange of information and best practices. Where appropriate, cooperation with the private sector, NGOs and the academic world should also be perused.

Such collaborations and cooperation should further continue in order to maximize the benefit for Least Developed Countries.

Capacity Building\textsuperscript{2}

Guidelines

The main objective of this project is capacity building of the beneficiary LDCs in the use of technical and scientific information (contained in patent document and scientific journals and literatures) to solve social and economic problems facing them. It is expected that at the end of the project a critical number of participants from the beneficiaries Least Developed

\textsuperscript{2} Following the launch of the project, the Government of Nepal was reported to have allocated a budget to establish an Appropriate Technology Center and Technology Fund. The Center will be used for search and delivery of technology information and capacity building. Nepal has also converted NEG into National Expert Group of Nepal on Intellectual Property.
Countries should be in a position to do the following:

1. Prepare a Search request;
2. Undertake Search for patent Information;
3. Prepare a Search Report;
4. Prepare a Technology Landscape Report; and
5. Prepare a Business Plan for implementation and to commercialize the identified appropriate technology.

This will require that the implementation of the project is undertaken in a manner such that a reasonable number of the nationals of the participating LDCs is involved in the exercise and obtain experience.

**Project Duration**

*Guidelines*

Taking into account the complexity of the implementation process the duration of the project will be 36 months. For details, please refer to Implementation Timeline, page 23.

### 2.4. Risks and Mitigation Strategies

**Risks which could impede project delivery and how to manage them**

Phase Two of the AT project for LDCs involves a series of activities with the aim of solving development problems in the process of transferring appropriate technology as a solution to the problem of the identified needs within a given time frame and in a particular location. Looked from the angle of this partnership program, it is medium to long term investment. The investment includes financial assistance, specific time frame, human and material resources. As the process involves several stages, it requires careful management and monitoring at each stage in order to avoid risks. Risks in the implementation of projects in least developed countries usually include lack of skilled personnel, interoperability of information and technology equipment and sustainability. All these risk areas in the specific countries need to be tackled in consultations and cooperation with the national expert group in the countries concerned and organizations involved.

(i) **Risk:** Different understanding of the definition of appropriate technology hampers the transfer of technology to be used for the identification need;
   
   Approach for mitigation: Close cooperation with experts knowing the specific development related problems and the solutions to the problem to the identified needs of individuals and communities;

(ii) **Risk:** Lack of adequate coordination among project partners might lead to delay in implementation of the project;
   
   Approach for mitigation: Assist in the overall organizational aspect including the preparation of work and business plans;

(iii) **Risk:** Institutional realities in LDCs such as lack of focal point institutions and technology information centers and relevant research institutions;
   
   Approach for mitigation: Assist the government concerned in the establishment of appropriate focal points in cooperation with partners for development: governments and organizations;
(iv) Risk: Lack of motivations and problems of having the right target group to participate in training and skills development program;
   Approach for mitigation: demonstration of case studies, films and videos on how technical solutions to identified problems brought about changes in the life of people and careful selection of the beneficiaries.

3. REVIEW AND EVALUATION

3.1. Project Review Schedule

Monitoring and Evaluation

Guidelines

1. The project in the selected country will start following the signing of a Partnership Agreement between WIPO and the Member State.

2. A work plan will be prepared in order to start the implementation of the project.

Key milestone to be included in the work plans will include:

   (a) Establishment of NEG;
   (b) Agreeing on the needs areas;
   (c) Organization of outreach programs;
   (d) Preparation of search request;
   (e) Undertaking search;
   (f) Preparation of Search Report;
   (g) Preparation of Technology Landscape Report;
   (h) Consultation on Technology Landscape Report;
   (i) Preparation of a Business Plan; and
   (j) Implementation of the Business Plan.

Reporting

NEG will prepare and submit to WIPO the following reports:

   (a) Inception report; the report will include reviewed work plan, information on the chairman, national expert, national secretariat and its staffing, support provided by the government to NEG and strategies of promoting and implementing the project.
(b) Mid-term report that will indicate achievement, challenges and what will need to be done in order to complete the project on time.

(c) End of project report articulating achievement against the set objectives, challenges realized, lessons learned and how to ensure that the business plan is implemented.

(d) Independent evaluation report.

3.2. **Project Self-Evaluation**

*In addition to the project self-evaluation, an independent evaluation will be undertaken for the project.*

<table>
<thead>
<tr>
<th>Project Outputs</th>
<th>Indicators of Successful Completion (Output Indicators)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National expert group</td>
<td>Expert group established in the three selected countries within 30 days of start of project</td>
</tr>
<tr>
<td>AT Landscape Report</td>
<td>AT landscape report to be made available to the government and WIPO</td>
</tr>
<tr>
<td>Business plan for implementing the selected appropriate technologies</td>
<td>One or more appropriate technologies would be selected for implementation and a business plan drafted to practically implement the project 6 months after the start of the project</td>
</tr>
<tr>
<td>Business Plans implemented;</td>
<td></td>
</tr>
<tr>
<td>Outreach program</td>
<td>Sector-specific, targeted outreach program completed within 24 months of start of the project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Objective(s)</th>
<th>Indicator(s) of Success in Achieving Project Objective (Outcome Indicators)</th>
</tr>
</thead>
</table>
| Strengthened national capacity of least developed countries in using appropriate technical solutions to address major national development challenges | 1. The people who have received training are using the acquired skills and knowledge;  
  2. National capacity building programs are continuing and being expanded through support from the government and other national stakeholders;  
  3. Institutions have been put in place to continue working on Appropriate Technology; and  
  4. NEG made a permanent organ to promote work on Appropriate Technology; |
| Improved understanding of the use of technical and patent information for innovation and national technology capacity-building | 1. Use of AT information for development;  
  2. Project replicated or being replicated to other areas with minimum support from WIPO; and |
| Exploitation of technical and patent information for achieving development objectives and goals | Resolution of needs based identified problems |
| 3. Utilization of Appropriate Technology for economic development included in the national IP policies and strategies; |
### 4. TOTAL RESOURCES BY RESULTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Six comprehensive reports on priority need areas</td>
<td>33,474</td>
<td>15,000</td>
<td>33,474</td>
<td>15,000</td>
<td>66,948</td>
<td>30,000</td>
<td>96,948</td>
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</tr>
<tr>
<td>Preparation of six patent information search reports for the identified need areas</td>
<td>22,316</td>
<td></td>
<td>22,316</td>
<td></td>
<td>44,632</td>
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<td>44,632</td>
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<tr>
<td>Six technical landscape reports using scientific and technical information provided after search reports</td>
<td>33,474</td>
<td>60,000</td>
<td>33,474</td>
<td>60,000</td>
<td>66,948</td>
<td>120,000</td>
<td>186,948</td>
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<tr>
<td>Approval of landscape report by the Multi Stakeholders Group</td>
<td>11,158</td>
<td>11,158</td>
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<td></td>
<td></td>
<td>22,316</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22,316</td>
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<tr>
<td>Preparation of business plan for the implementation of the technology landscape report</td>
<td>33,474</td>
<td>20,000</td>
<td>33,474</td>
<td>20,000</td>
<td>66,948</td>
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<tr>
<td>Project evaluation report</td>
<td></td>
<td>10,000</td>
<td></td>
<td>10,000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>133,896</td>
<td>95,000</td>
<td>133,896</td>
<td>95,000</td>
<td>10,000</td>
<td>267,792</td>
<td>200,000</td>
<td>467,792</td>
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<td></td>
</tr>
</tbody>
</table>

*One short term professional at P1-P2 level*
5. NON-PERSONNEL RESOURCES BY COST CATEGORY

<table>
<thead>
<tr>
<th>Activities</th>
<th>Travel and Fellowships</th>
<th>Contractual Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Staff Missions</td>
<td>Third-party Travel</td>
<td>Publishing</td>
</tr>
<tr>
<td>Six comprehensive reports on priority need areas</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of six patent information search reports for the identified need areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Six technical landscape reports using scientific and technical information provided after search reports</td>
<td>20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of business plan for the implementation of the technology landscape report</td>
<td></td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Project evaluation report</td>
<td></td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30,000</td>
<td>20,000</td>
<td>150,000</td>
</tr>
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</table>
### 6. IMPLEMENTATION TIMELINE

<table>
<thead>
<tr>
<th>Activity</th>
<th>Quarters (From July 2014 to June 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
</tr>
<tr>
<td>1. Selection of countries</td>
<td></td>
</tr>
<tr>
<td>2. Establishment of the National Expert Group (requesting the government concerned to establish it)</td>
<td></td>
</tr>
<tr>
<td>- Recruitment of International Experts</td>
<td></td>
</tr>
<tr>
<td>- Recruitment of National Experts</td>
<td></td>
</tr>
<tr>
<td>3. Identification of development need areas</td>
<td></td>
</tr>
<tr>
<td>- Need identification</td>
<td></td>
</tr>
<tr>
<td>- Need prioritization</td>
<td></td>
</tr>
<tr>
<td>4. Preparation of Search Request</td>
<td></td>
</tr>
<tr>
<td>5. Preparation of Search Report</td>
<td></td>
</tr>
<tr>
<td>6. Selecting one or more appropriate technologies to be practically implemented</td>
<td></td>
</tr>
<tr>
<td>7. Preparation of the Landscape Report</td>
<td></td>
</tr>
<tr>
<td>8. Preparation of the Business Plan</td>
<td></td>
</tr>
<tr>
<td>9. Organization of national outreach and skills development program</td>
<td></td>
</tr>
</tbody>
</table>

**REVIEW SCHEDULE**
APPENDIX

APPLICATION FORM

1. CONTACT DETAILS
   a. Name of Applying Officer______________________________________________
   b. Designation__________________________________________________________
   c. Telephone___________________________________________________________
   d. Email_______________________________________________________________
   e. Institution___________________________________________________________

2. THE PROPOSED PROJECT
   a. Name of the project _________________________________________________
   b. Brief description of the project and the technology sought (maximum 250 words).
   c. Link of the project to national development agenda (explain the importance of the project to the national development, citing specific development plans or strategies – maximum 150 words).
   d. Is there a budget for the project?  If yes please explain.
   e. Is there a time frame for the implementation of the project?  If yes state.

3. POSSIBLE MEMBERS OF NATIONAL EXPERT GROUP
   a. Which ministry will oversee the implementation of the project?
   b. Which stakeholders can effectively contribute to the realization of the project
      • Government departments
      • Business Community
      • Potential users of the technology
      • UN bodies
      • NGOs
      • Other development partners
   c. Are there taskforces or committees appointed that undertake duties of national importance for development?  If yes, how are they appointed and compensated?
   d. Is the Government in a position to provide an office for the coordination of the project?  Would the government be willing to second and pay for secretariat to support the office?