**Step 9: Proposal Summary**

**Proposal Summary**

#### \* 1. TRL Status Current TRL Expected TRL

**TRL Details**

9

6

New Facility Strengthening of existing facility

If you choose “New Facility” the following form will be appeared –

**\* 2.1 Aim/Objective of the proposal:**  ASHA (Accredited Social Health Activists) workers are helping to build a strong foundation for promoting healthy practices in our society. They play critical role for various health programmes of the Government of India. Now, it is time to empower them by imparting training and upgrading skills as a majority of ASHAs are village women with low literacy skills and they face operational challenges in conducting routine maternal, new-born, child health activities and infection prevention. ASHAs are the first point of contact for the needy rural masses and can become frontline healthcare workers by imparting training in regional languages. The “**Aarogya Patrika”** is designed with the aim of blurring all these possibilities oflack of access to healthcare information, refresher training and meaningful supervision so that their ability to contribute to improved maternal and new-born health outcomes will play a major role.

**2.2 Novelty of the proposal**

**\* Not more than 180-200 words :**  The app has the added benefit of improving the social status of women health workers, since they will be some of the first ones to get smart phones in their villages and blocks. Unlike the standard criticism of online courses and digital applications, that doesn’t recognise deprivation, class and dehumanises every interaction, this is one app that actually enhances humanised interaction by guiding the service providers (ASHAs and AWWS, in this case) to have structured inter-personal conversations with the mother and her family members to counsel and care for them better.

The app also simplifies public administration, eliminating the need for data-entry operators.

The app manages to convert the data into digital format right from the point of entry, to be used, analysed, accessed and processed across the health system by all relevant staff members.

**Essence of The Study Highlighting The Following**

**\* 3.1 Significance and Impact/Value of the**

**Proposal**

App can help ASHAs identify and correctly refer sick new-borns

Application can improve CHW (Community Health Worker) knowledge and skills

Refer and track high risk pregnant women, recently delivered women, new-borns and infants

Supporting midwives in the field

Addressing the digital divide, low literacy and poor connectivity

**\* 3.2 Rationale**

» **Improvement in counselling sessions:** It will aid them in remembering important topics and, with all messages now available in the application, they no longer forget to communicate important information during home visits;

» **Visual Aids:** Ability to show them pictures and videos of relevant subjects;

» **Assessment Guide**: Assistance in assessing the condition of pregnant women, new mothers and new-born children.

» **Improved Monitoring**:  Real time monitoring of ASHAs will result in increasing the self-confidence and engagement of the ASHAs

» **Medical Administrator**: Access to real-time data for the Medical Administrator regarding the performance of ASHAs - aiding them in counselling low performing ASHAs in order to improve performance.

**\* 3.3 Inventive Step/Innovation**

· Voice-guided vernacular messages, illustrations, videos

 · Easily accessible on-the-go content

 · Auto-categorization of sick new-borns with automated alerts to supervisors

 · Web-based dashboard and reports

**\* 3.4 Scope of Industrial Application**

In today’s information era people need information even on the move. The relatively low cost mobile wireless communication, creative thinking and thrust for information on the move laid down the foundation mobile applications. The only industry which is growing continuously in the last few years is the mobile application industry. Considering the penetration, utilization and benefits of mobile applications, it can be extended to empower the ASHA workers. Design and deployment of the “**Aarogya Patrika”** mobile applicationin multiple regional languages will improve the implementation of health-related programmes initiated by government of India through ASHA workers. Based on health-related data collection and analysis by “**Aarogya Patrika”**, the requirement for medical solutions (such as vaccines, medical kits etc.) can also be optimized. As the data is collected over a period of time, the future prediction of drugs, medical facilities, equipment etc for existing as well as new diseases is also possible. This will benefit the ASHA workers, society and country at large.

**\* 3.5 National Importance / Social**

**Relevance**

Social development of a nation is dependent on the health of its population.

The impact of ASHAs on their communities is largely dependent on the quality of their training and other health system factors. Currently there is inadequate health system support for ASHAs including a lack of strong supervision, limited opportunities for continuing education and training and poor workload management. They get limited training on community mobilization, child immunization and others due to which they have limited knowledge and skills.

Empowering Asha's with **"Aarogya Patrika**" will help them to overcome the barrier

**\* 3.6 Commercialization Potential**

Availability of high quality logistics data has been one of the greatest challenges facing the healthcare system.

Without these data, decision makers cannot adequately manage the supply chain, risking the possibility that patients won’t receive the medicines they need. Most of these applications allow a lower-level health facility to transmit information regarding their supply of essential medicines to the higher-level facility or warehouse which then provides the commodities. In some cases, these applications have even been utilized by community health workers to ensure they have the basic supplies needed.

the requirement for medical solutions (such as vaccines, medical kits etc.) can also be optimized. As the data is collected over a period of time, the future prediction of drugs, medical facilities, equipment etc for existing as well as new diseases is also possible. **This will benefit the ASHA workers, society and country at large.**

**\* 3.7 Potential Competitors**

**mSakhi**

**\* 3.8 Risk Factors**

**Human Challenges:**

Knowledge gaps are a barrier. Health care workers in low-cost settings accustomed to doing things manually might find difficulties or resist adopting new technologies that would require a series of training.

With proper training this knowledge gap can be reduced and adopting new technologies will become easy. By adopting this new technology proper health diagnosis will be possible.

**Infrastructural and Environmental Challenges:**

Most ASHAs worked in areas with relatively poor connectivity, so our intervention needed to work over a 2G network connection.

We are storing it locally in case if network is not available.

The physical working environment also presented a challenge since ASHAs frequently work outside in bright sunlight, which made it difficult to read detailed graphics or text.

Anti – glare cover

**\* 3.9 Has the Preliminary work done so far. If yes**  Yes No

**Please upload the preliminary data available**

If you click on “Yes” the following field are appeared

Browse

**Upload the preliminary (If available) (Only pdf Allowed)**

**View file**

**\* 3.10. National and International status**

**Of proposed technology or product.**

A sample of existing mobile phone based tools applied to maternal and child health are mentioned below:

A. Text message systems :  Server-based SMS text messaging systems such as Child Count+ and mMitra are used to deliver maternal and child health information to mothers, and provide epidemiological data for use by the local government.

B. Toolkits: Some higher-cost diagnostic hardware toolkits, such as Care Mother , include commercial biomedical devices (Doppler ultrasound device, blood pressure monitor, and electronic glucose meter, urinalysis), which are used to help identify and prevent high risk pregnancies.

C. Mobile Health Data Collection Platforms: Many small companies, such as Dimagi , Mobilitas , as well as government initiatives such as M-Sehat now offer software platforms that support case management and integrate with electronic medical record systems. Many academic research projects and initiatives have also been developed for community health workers that leverage the increasing availability of smart phones.

**\* 3.11. Business Strategy**

On meeting the ASHAs face-to-face, the most remarkable aspect was their energy and impetus towards the tangible and intangible growth offered by this opportunity. The ASHAs have demonstrated their potential. This massive effort towards sustaining a national CHW scheme should not be allowed to get dissipated by a lack of support for the ASHAs. There must be an institutionalised response to the aspirations and the vulnerabilities of these women. The anxiety to sustain the ASHA scheme and their heartfelt expressions of intangible gains from the work might lead to undermining the difficulties and the aspirations of these women

We would like the government to implement our app as it empowers frontline health workers to do their jobs better and uses the most recent technology. If we are able to bring in more funding, the application will continue to evolve

**4. Is this Proposal Based on IP Owned by**

**The Applicant/Collaborator/Licensed** Yes No

**From Abroad?**

If you click on “Yes” the following field are appeared

**\* Provide Details of IP Applicant Collaborator Licensed Ownership By Jointly by Company & Collaborator**

**\* Upload Patent/Patent Applied for (Only pdf Allowed)**

Browse

**License Agreement**

**View file**

**Anticipated Outcome / Deliverables**

**5.1** . Empower ASHA by flexibility to attend training and skills upgrading through remote access.

**5.2** Improved Self-learning and Counselling through multiple regional languages.

**5.3** Real-Time Monitoring and Management of health-related government programmes.

**5.4** Enhancing decision-making capabilities with real time analysis.

**5.5** Seamless integration of multiple roles for ASHA workers.

**Relevant references**

**6.1** Indrani Medhi, Aman Sagar, and Kentaro Toyama. 2006. Text-free user interfaces for illiterate and semi-literate users. In Information and Communication Technologies and Development, 2006. ICTD’06. International Conference on. IEEE, 72–82.

**6.2** R. Fletcher, X. S. Díaz, H. Bajaj and S. Ghosh-Jerath, "Development of smart phone-based child health screening tools for community health workers," 2017 IEEE Global Humanitarian Technology Conference (GHTC), San Jose, CA, 2017, pp. 1-9, doi: 10.1109/GHTC.2017.8239337.

**6.3** R. V. Vaidya and D. K. Trivedi, "M-health : A complete healthcare solution," 2017 International Conference on Computing Methodologies and Communication (ICCMC), Erode, 2017, pp. 556-561, doi: 10.1109/ICCMC.2017.8282527.

**6.4** N. D. Valakunde et al., "Smart ASHA pregnancy monitoring system," 2017 International Conference on Big Data, IoT and Data Science (BID), Pune, 2017, pp. 185-192, doi: 10.1109/BID.2017.8336596.

**6.5** Bhatia, Kavita. (2014). Performance-based incentives of the ASHA scheme stakeholders' perspectives. Economic and political weekly. 145-151.

**7. Have you ever submitted this related proposal**  No Yes

**before under any of the BIRAC Schemes?**

If you click on “Yes” the following field are appeared

Remove

Add

**Step 12: Proposal Objective and Timelines**

#### PROPOSAL OBJECTIVES & WORK PLAN

\* Please indicate overlap of any objective funded by any other funding agency/ (ies). Kindly provide disclosure amendments.

\* Indicate how each objective is exempted for Service Tax, in case exemption is desired.

|  |  |  |  |
| --- | --- | --- | --- |
| **Objective** | **Methodology/Experimental Design Detailed Work Plan** | **Alternate Strategies** | **Process Indicator for Measuring Success** |
| Improved Self-learning and Counselling through multiple regional languages. |  |  |  |
|  |  |  |  |
|  |  |  |  |

Fill all the necessary fields.

Save your form.

Save

Reset all the fields.

Reset

Cancel the form.

Cancel

**Step 13: Objective Wise Activities & Timelines**

##### **Objective Wise Activities & Timelines**

##### *Note: Please Select and Remove Unused Rows*

##### **Objective: Test objective 1**

This form appeared you if you filled the previous form “[SPECIFIC PROJECT PLAN AND DELIVERABLES](http://birac.nic.in/user/addobjectivefullmisc_new.php?calid=12&pid=2623&category_id=5&action=edit)”.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Select** | **Activities** | **Month of Start of Activity** | **Month of End of Activity** | **Indicators Of Progress** | **Role of Academia(Please enter details)** | **Role of Partner** |
|  |  | 0 |  |  |  |  |
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Add More

Remove

|  |  |  |  |
| --- | --- | --- | --- |
| **Please enter 1st Milestone under 2nd Objective :** | | | |
| **S. No** | **Milestone** | **Month of Start of Activity** | **Month of End of Activity** |
| 1. |  | 0 |  |

Remove

Add More

##### **Objective: Test objective 2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Select** | **Activities** | **Month of Start of Activity** | **Month of End of Activity** | **Indicators Of Progress** | **Role of Academia(Please enter details)** | **Role of Partner** |
|  |  | 0 |  |  |  |  |
|  |  |  |  |  |  |  |
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|  |  |  |  |
| --- | --- | --- | --- |
| **Please enter 2nd Milestone under 2nd Objective :** | | | |
| **S. No** | **Milestone** | **Month of Start of Activity** | **Month of End of Activity** |
| 2. |  |  |  |

Fill all the necessary fields.

Save

Save your form.

Reset all the fields.

Reset

Cancel

Cancel

Browse

#### Quarterly Timelines/Minimum Work Programme/Milestones for Quantifiable Outputs

#### Step 14 GANTT/PERT Chart

**Upload Chart :**

Cancel

Save

**Step 15: Proposal Milestones**

##### **Proposal Milestones**

Note: - Please Select At least 3 Activities as Monitor able

Milestones for Release of Instalments.

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Milestones** | **Month of End of Activity** | **Description** |
| \* 1. | App development and Panel development | --NA-- | --NA-- |
| \* 2. | Deploy it as a service | --NA-- |  |
| \* 3. | Data analytics for each entry | --NA-- |  |
| \* 4. | Graphical based learning model  And multiple language support | --NA-- |  |
| \* 5. | Incremental Development | --NA-- |  |

**Step 16: Budget Justification (Available)**

##### **Details of Equipment Available for this Project with Applicant**

##### **Available Equipment Details**

Note: Please select and remove unused rows.

|  |  |  |
| --- | --- | --- |
| **Select** | **Name of Equipment** | **Units** |
|  | PC’s/Laptop | 5 |
|  | Test Systems | 2 |
|  | WI-FI high speed internet |  |
|  | Mobile Phones | 5 |
|  | Printers | 2 |

Add More

Remove

Fill all the mandatory details.

**Step 13: Proposed**

##### **Details of Equipment Proposed To Be Acquired Through BIRAC Contribution for Applicant**

##### **Proposed Equipment’s & Accessories Details**

Note: Please select and remove unused rows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Select** | **Infrastructure/Equipment** | **Capacity** | **Quantity** | **Specific Requirement in the Project** | **Total Estimated Value**  **(Rs. In Lakh)** |
|  | Virtual Machine Service |  |  | Provide auto-scalable, redundant, dynamic computing capabilities |  |
|  | Storage Service |  |  |  |  |
|  | Database Service |  |  | The database consists of a number of tables; some are fixed while some are created dynamically. These tables storing the data are implemented in MonoDB MongoDB database is used as it is easy to use, fast and can store large amount of data efficiently requiring a little configuration. |  |
|  | Network Service |  |  |  |  |
|  | Support Service |  |  |  |  |
| **Total \*** | | | | | |

Remove

Add More

|  |
| --- |
| **Accessories to Be Acquired (Rs in Lakh)** |

**Step 14: Details of Manpower (Available)**

##### **Manpower (Scientific and Technical) Already with Applicant Who Will Work In this Project**

##### **Manpower Details Available**

Note: Please select and remove unused rows.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Select** | **Name** | **Qualification** | **Age (In Years)** | **Full Time/Part Time (Specify hours Per Day)** | **Experience**  **(In Year)** | **Role In The Project** | **Positi on** |
|  | Dr. Suresh Ukrande |  |  |  |  | PI |  |
|  | Dr. Hariram Chavan |  |  |  |  | Android developer |  |
|  | Dr. Sunita Patil |  |  |  |  | Data Analytics |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Add More

Remove

**Step 15: Details of Manpower (To be hired)**

##### **Manpower (scientific and technical) to be hired for the project through BIRAC contribution** **for Applicant**

##### **Manpower Details to be hired**

Note: Please select and remove unused rows.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Select | Position | No. of Position | Minimum Qualification | Experience  (In Year) | Age Limit, if any (In Years) | Duration For Which To be hired (in Years) | Role in the Project | Proposed Annual Salary (Rs. In Lakh) | Total Cost |
|  | Data entry operator | 1 | BSC/Diploma | - | - | - |  |  | 200000 |
|  | Cloud Manager | 1 | Engineering Graduate |  |  |  |  |  | 500000 |
|  | Android developer | 1 | Engineering |  |  |  |  |  | 300000 |
|  | MERN Developer |  |  |  |  |  |  |  | 500000 |
|  |  |  |  |  |  |  |  |  | 16 lakh |

Remove

Add More

If you don’t want to save this form now. You save it next time with modification.

Save as Draft

Save

Save your form.

Reset

Reset all the fields.

Cancel

Cancel the form

**Step 16: Details of Manpower (Consumable Details)**

**Through Applicant / BIRAC Contribution for Applicant**

##### **Consumable Details**

Note: Please select and remove unused rows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Select | Items | Quantity | Units (e.g. g/ml etc.) | Approximate Cost (Rs. In Lakhs) | Justification for the Requirement |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Remove

Add More

**Total Amount Required For Consumable**

0.00

**Step 17: Details of Manpower (Justification for Other Recurring Heads)**

**Through Applicant / BIRAC Contribution for Applicant**

##### **Justification for Other Recurring Heads**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Travel Cost (Rs. In Lakh)** | **Travel Justification** | **Contingency Cost**  **(Rs. In Lakhs)** | **Contingency Justification** | **Overhead Cost** | **Overhead Justification** |
| 32000 | To conduct survey, get input from Asha’s and improve the app incrementally | 20000 | misfortunes, misjudgments, wrong calculations, collaboration | 40000 | unexpected delays, external factors, bizarre work, hidden costs, abnormalities, |

**Step 18: Details of Manpower (Details on Work to be outsourced)**

##### **Details on Work to be outsourced**

Note: Please select and remove unused rows.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Select | Work Proposed To Be Outsourced | Name of the Institute/Organization to Whom it is Proposed to be Outsourced | Whether The Applicant has Already Signed any Contract With this Institution/Organization | Estimated Cost Involved In (Rs. In Lakhs) |
|  | Content creation |  | No | 1 lakh |
|  | Doctor |  | No | 3 lakh |

**Total**

0.00

Remove

Add More

% of Contribution By The Applicant of the above Total Cost: %

0.00

Contribution By the Applicant:

0.00

Support Requested from BIRAC:

Fill all the mandatory fields.

**Step 19: Details of Manpower (Other Financial Details)**

##### **Other Financial Details**

1. **Details of the Other Sources of Funding Received/Requested/Committed For the Proposed Study. Please Include Government, Private, International Any Other Source**

N/A

1. **Funding Received So Far/Approved By Any Of The Government Agencies To The Applicant To Carry Out Any Other Activity During The Last Five Years(Give Details Like Project Title, Amount Received/Approved, Funding Agency And Status Of The Project)**

#### Step 20: BUDGET DETAILS OF THE APPLICANT INSTITUTE

##### **Name of Applicant: ABC Collaborator Type -Institutions**

#### Non Recurring Cost (Rs in Lakhs)

|  |  |  |  |
| --- | --- | --- | --- |
| **Equipment**  **(A)** | **Accessories**  **(B)** | **Total**  **(A+B)** | **Total Support requested from BIRAC**  **(Rs in. Lakhs))** |
| 0.00 | 0.00 | 0.00 | 0.00 |
| Grant-In-Aid | |  |  |

#### B. Recurring Cost (RS in Lakhs)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Manpower**  **(A)** | **Consumables (B)** | **Travel** | **Contingency** | **Total (A+B+C+D)** | **Total Support requested from BIRAC**  **(Rs in. Lakhs))** |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grant-In-Aid | | | | 0.00 | 0.00 |

#### Step 21: BUDGET DETAILS OF THE COLLABORATOR

##### **Name of Applicant: ABC Collaborator Type -Institutions**

#### Non Recurring Cost (Rs in Lakhs)

|  |  |  |  |
| --- | --- | --- | --- |
| **Equipment**  **(A)** | **Accessories**  **(B)** | **Total**  **(A+B)** | **Total Support requested from BIRAC**  **(Rs in. Lakhs))** |
| 0.00 | 0.00 | 0.00 | 0.00 |

#### B. Recurring Cost (RS in Lakhs)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Manpower**  **(A)** | **Consumables (B)** | **Travel (C)** | **Contingency**  **(D)** | **Overhead Cost(E)** | **Total (A+B+C+D+E)** | **Total Support requested from BIRAC**  **(Rs in. Lakhs))** |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Step 22: Details of Manpower (Budget Summary)**

##### Name of Company **Test Company**

##### **Budget Summary**

**Contribution by Applicant and Collaborators**

0.00

Applicant

Sub Total (A):

0.00

|  |  |  |  |
| --- | --- | --- | --- |
| **Support Requested From BIRAC :** | | **Grant in Aid** | **Loan** |
| **Applicant** | 0.00 | 0.00 | 0.00 |
| **Collaborators Name** | 0.00 | 0.00 | -N.A- |
| **Sub Total (B):** | 0.00 | 0.00 | -N.A- |
| **Total Project Cost (A+B)** | | | 0.00 |

You just need to review the calculation and verify the form.

Verify

Verify your form.

Cancel the form.

Cancel

**Step 23:**  [**DECLARATION DOCUMENT**](http://birac.nic.in/user/document_final_new.php?calid=61&pid=4295&action=edit)

#### DECLARATION

Browse

**\* Please Upload the Declaration Document :**

**Please upload only pdf files**

Save

Save your form.

Cancel the form.

Cancel