Benazir Income Support Program (BISP) National Social Protection Program (CR.5973-PK) TERMS OF REFERENCE SENIOR SOFTWARE DEVELOPER

1. BACKGROUND

Initiated in July 2008 by the Government of Pakistan (GoP), BISP is the first ever comprehensive and countrywide Social Safety Net (SSN) programme. BISP's primary aim is to eradicate poverty through provision of unconditional and conditional SSNs. Unconditional SSNs through cash injection enhance buying capacity of the disadvantaged families. Through conditional SSNs schooling of the children aged 05-12 is supported. Between 2008 and 2012, BISP carried out a National Socio-Economic Survey (NSES) to take stock of the socio economic status of entire population of the country by applying a comprehensive Proxy Means Test (PMT) to NSES in order to identify eligible beneficiary families with PMT scores less than 16.17.

It is widely acknowledged that household demographics change to a considerable extent over a duration of five years, and, often, economic registries have errors at three levels i.e. (i) design, (ii) Implementation, and (iii) time/aging factor which in turn affect the measure of accuracy. In consideration of these, this year, BISP has initiated a fresh National Socio Economic Survey to update its National Socio-economic Registry (NSER).

The World Bank is actively engaged with the GoP and BISP since 2009. The World Bank's initial support to BISP came through sectoral Development Policy Credit (US\$150) in 2009, accompanied by Social Safety Net Technical Assistance (TA) Project (US\$60 million). In 2012, the TA Project was restructured with additional financing of US\$ 150 million to support expansion of the program and strengthening administration and performance by introducing disbursement linked indicators (DLIs) and was closed on June 30, 2017.

World Bank is extending its support through National Social Protection Program (NSPP), a US\$ 100 million credit from IDA. It will support the GoP through, a Program for Results (PforR) in an amount of US\$ 90 million by making disbursement against the key results as part of the Government's program; and an Investment Project Financing (IPF) TA component in an amount of US\$ 10 million to finance critical areas to achieve the quality of results. The expected closing date of NSPP is June 30, 2021.

For timely and effective development/maintenance and roll out of BISP programs, BISP is in the process of putting in place the required technical staff for the IS wing. To this end, BISP requires the services of a **SeniorSoftware Developer**.

2. OBJECTIVES OF THE ASSIGNMENT

The **Senior Software Developer** will be responsible for the design, development and integration of BISP software applications required to support BISP's day to day operations including exchange with external stakeholders and the decision making process within BISP across

hierarchy of tehsil, division, regions and head office.

3. RESPONSIBILITIES

The Senior Software Developer shall be responsible for the following tasks:

- In coordination with Principal Technology Advisor/Software Project Manager and IS System Architect/Technical Lead plan, design and implement computer application systems, modules and any software components needed to support BISP programmes and projects;
- Document all technical details and architecture to CMMI-III level or equivalent.
- Develop Systems and module graphical interfaces, web modules, database modules, desk based and mobile applications, reports and statistics, and any software components needed to deliver complete and functional requirement by the Information Systems cell.
- Perform all necessary software maintenance, including coding, testing, debugging, upgrading and modifications of software requested by the IS System Architect and Director IS;
- Apply software development methodologies to develop, implement and test system and software components.
- Design, develop and implement system and software technical specifications based on business requirements provided by IS management. Develop and maintain system and software documentation in order to facilitate maintenance and upgrade activities.
- Provide the necessary technical support to all members of the IS team and work as team
 to accomplish the software development and implementation tasks. Contribute
 technical and professional knowledge and experience to improve BISP IS operations and
 technical platform.
- Develop and provide a weekly project status report describing the status of the above activities and any issues that may emerge, with conclusions and recommendations in regards to the BISP IS software development operation.
- Strong and effective inter-personal and communication skills and the ability to interact professionally with a diverse group of BISP staff.
- Any other technical task required in a team environment for solution delivery.

4. TIMEFRAME AND SUPERVISION

The initial contract will be for one year subject to further extension based on satisfactory performance. The professional will work with BISP Information Systems cell to perform the assigned tasks and report to the IS Systems Architect/*Principal Technology Advisor*.

5. QUALIFICATIONS AND EXPEREIENCE

- At least Bachelor's degree in Computer Sciences (4 years) or a related discipline.
- At least 5 years of working experience as Software Developer or Systems Engineer in enterprise level projects in reputed organizations - preferably CMMI/ISO certified.
- Extensive Web, Windows Services, Encryption, application development in .Net/VC, C++, Java, Android &WPF application development Framework is required.
- Experience with developing native Android applications will be preferred.
- Experience with implementing ArcGIS will be preferred.
- Written professional code over 1.5 million lines, preferably at enterprise level/large application(s).
- Proven database programming with PL SQL (2+ years), SQL / Optimization (expert level),
 Oracle / SQL Server (Large Scale Systems).
- Must have prior experience in taking over code intensive applications in the middle and enhance them.
- Knowledge and experience using the MySQL, PostgreSQL, ORACLE database are desirable. Knowledge and experience in JAVA is preferable.
- Proven ability to work in a collaborative, multi-tier team environment.
- Good communication, people management, and writing skills.
- Work experience from certified software development & product companies is preferred.