



BANGLADESH BANK

Head Office, Motijheel, Dhaka

Financial Sector Support and Strategic Planning Department

**Request for Expression of Interest (REOI)**

**For**

**Selection of Individual Consultant: EMV Specialist (International)  
under Financial Sector Support Project (Package No: BB-S19)**

**Introduction and Background:**

This Request for Expression of Interest (REOI) follows the general procurement notice for this project that appeared in United Nations Development Business No. WB3146-07/15 of July 09, 2015. The Government of People's Republic of Bangladesh received a credit (**IDA Credit No. BD 5664**) from the International Development Association (IDA) and intends to apply part of the proceeds of this credit to payments under the contract for hiring EMV Specialist (International) in order to strengthen the payment and settlement systems of Bangladesh.

Bangladesh Bank (BB) has undertaken the Financial Sector Support Project (FSSP) with the financial assistance of International Development Association (IDA) of the World Bank in order to implement a number of components for maintaining the stability and efficiency of the financial system of Bangladesh. One of the main components of the FSSP is to strengthen Financial Market Infrastructure. FSSP will work on improvement of financial infrastructure of the country with special focus on areas of Payment and Settlement System Development, expanding and modernizing the Credit Information Bureau (CIB), strengthening the systems of the Bangladesh Financial Intelligence Unit (BFIU) and integration with systems of other stakeholders, and Strengthening the IT Governance and IT management of the Bangladesh Bank, optimizing the IT assets of the BB and enhance awareness of IT security aspects for the financial industry. Bangladesh Bank has implemented Bangladesh Automated Clearing House (BACH) with its two wings - Bangladesh Automated Cheque Processing System (BACPS) and Bangladesh Electronic Funds Transfer Network (BEFTN). BB has also implemented National Payment Switch Bangladesh (NPSB) to facilitate inter-bank electronic payments. BB has adopted initiatives to facilitate e-Payment Gateway. In line with these developments, transactions of chip-based card payments have much increased. Now we necessitate addressing both organizational and customer security issues in order to keep pace with changing needs of card-based payments. Therefore, BB intends to hire the assistance of an international EMV specialist in order to address these issues.

**Tasks and Responsibilities:**

The key duties and responsibilities of the Specialist will include:

1. Develop technical document for national chip based payment card specification for both contact and contactless interface in compliance with EMV standard for NPSB.
2. Prepare technical documents for national chip based payment card application specification.
3. Develop national chip based payment card specification that must be compatible with JAVA, MULTOS operating system or any other open international/global EMV platform. It must be accepted and compatible with EMVco certified different delivery channels such as ATM, POS, Kiosk, Mobile, Internet, etc.
4. Evaluate the existing EMV platforms in Bangladesh (both issuing and acquiring) for preparation of national chip standard.
5. Provide communication protocols for both contact and contactless card interface in the specification.
6. Provide Online Data Authentication and three types of Offline Data Authentication (ODA) mechanism in the specification: a) Static Data Authentication (SDA), b) Dynamic Data Authentication (DDA) and c) Combined Data Authentication (CDA).
7. Provide Cryptographic Keys, RSA Algorithms, Data elements and secured messaging mechanism in the specification.

8. Conduct necessary onsite trainings to internal stakeholders on EMV specification and national chip based payment card scheme specification.
9. Coordinate during implementation of national chip based payment card application in Bangladesh Bank and participating banks.
10. Prepare statement of works for dispute resolution mechanism and fraud management solution.

**Required Skills and Experience:**

The Specialist should preferably possess the following qualifications:

1. Bachelor's degree in Finance/Information Technology with at least 12 years experience in a reputed organization of which having over 8 years in Payments automation, Cards and payment system area.
2. Experience in EMV compatible ATM and POS Certification project.
3. Having thorough knowledge and understanding of systems evaluation and IT Security standards.
4. Knowledge on Card Management System, Authorization system and Fraud Monitoring system on large scale.
5. Proper knowledge on information/requirements gathering from users and experience of preparing Business Requirement Specifications Document (BRS) and System Requirement Specification Document (SRS).
6. Familiarity with the emerging technologies such as Contactless, NFC, Mobile payments.
7. Good understanding of ATM switching, NDC/DDC Protocol, ISO standards and Emulation tools etc.
8. Extensive knowledge on Digital Certificate application, PKI and Cryptography.
9. Excellent drafting and reporting skills.
10. Excellent skills in communicating in English both verbally and in written form in a clear, organized and professional manner with all level of management.
11. Firm belief in teamwork and gender equality.
12. Availability to travel outside Dhaka if required.

Bangladesh Bank now invites eligible individual specialists to indicate their interest in providing the services. The position will be selected solely based on experience and qualification. Any individual or firm (firm has to apply proposing its individual) may indicate their interest in providing the services. Only the experiences and qualifications of individuals shall be used in the selection process. If a firm applies proposing its individual, their corporate experience shall not be taken into account. Contract will be signed with the individual/firm. Interested specialists must provide information to substantiate that they are qualified to perform the services. Expression of Interest shall have to be submitted to the address of the undersigned **on or before December 7, 2017** via mail or e-mail ([pd.fssp@bb.org.bd](mailto:pd.fssp@bb.org.bd)) and be clearly marked "Expression of Interest for EMV Specialist (International)". Interested candidates may obtain further information regarding "Terms of Reference" from the website of Bangladesh Bank (<https://www.bb.org.bd/aboutus/tenders/tenders.php>) or the address below, during working days, from 10.00 A.M. to 05.00 P.M.

The EMV Specialist (International) will be hired for 12 months which may be extended at the purchaser's requirement. Bangladesh Bank authority solely preserves the right to accept or reject any or all the EOs at any stage of selection process without assigning any reason whatsoever and without incurring any liability to the affected candidate(s).

**(Subhankar Saha)**

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BANGLADESH BANK  
Head Office, Motijheel, Dhaka  
Financial Sector Support and Strategic Planning Department  
**Terms of Reference (TOR)**

**For**  
**Selection of Individual Consultant: EMV Specialist (Package No: BB-S19) under**  
**Financial Sector Support Project**

**Introduction and Background:**

Bangladesh Bank (BB) has undertaken the Financial Sector Support Project (FSSP) with the financial assistance of International Development Association (IDA) of the World Bank in order to implement a number of components for maintaining the stability and efficiency of the financial system of Bangladesh. One of the main components of the FSSP is to strengthen Financial Market Infrastructure. FSSP will work on improvement of financial infrastructure of the country with special focus on the following four broad areas: (a) Payment and Settlement System Development, (b) Expanding and modernizing the Credit Information Bureau (CIB), (c) Strengthening the systems of the Bangladesh Financial Intelligence Unit (BFIU) and integration with systems of other stakeholders, and (d) Strengthening the IT Governance and IT management of the Bangladesh Bank, optimizing the IT assets of the BB and enhance awareness of IT security aspects for the financial industry. Bangladesh Bank has implemented Bangladesh Automated Clearing House (BACH) with its two wings - Bangladesh Automated Cheque Processing System (BACPS) and Bangladesh Electronic Funds Transfer Network (BEFTN). BB has also implemented National Payment Switch Bangladesh (NPSB) to facilitate inter-bank electronic payments. BB has adopted initiatives to facilitate e-Payment Gateway. In line with these developments, transactions of chip based payment card have been increased. Now we necessitate to address both organizational and customer security issues in order to keep pace with changing needs of card based payments. Therefore, we will require the assistance of an international specialist in order to address these issues. Pertinently, there is a provision to hire EMV (Europay, MasterCard, and Visa) Specialist under FSSP who is supposed to work on the aforementioned requirements in compliance with EMV standard for NPSB.

**Objective**

The broad objective of this consulting service will be to propose an implementation of National CHIP standard for National Payment Switch of Bangladesh (NPSB). It will be used for proprietary cards issued by commercial banks of Bangladesh, which will be acceptable in the EMV standard terminals. The specialist will be responsible for both preparing the standard and monitoring the implementation activity. Bangladesh Bank expects card base transaction will be more safe, secure and efficient after implementation of National CHIP standard.

**Tasks and Responsibilities:**

The key duties and responsibilities of the Specialist will include:

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9. Coordinate during implementation of national chip based payment card application in Bangladesh Bank and participating banks.
10. Prepare statement of works for dispute resolution mechanism and fraud management solution.
11. Submit a work plan on the basis of above ToRs within 10 working days of joining and provide monthly written progress report, in addition to final report, to the General Manager of Payment Systems Department.

#### **Required Skills and Experience:**

The Specialist should preferably possess the following qualifications:

1. Bachelor's degree in IT, Economics, physics, Mathematics, Statistics or any department of business faculty with at least 12 years experience in a reputed organization of which having over 8 years in Payments automation, Cards and payment system area.
2. Experience in EMV compatible ATM and POS Certification project.
3. Having thorough knowledge and understanding of systems evaluation and IT Security standards.
4. Knowledge on Card Management System, Authorization system and Fraud Monitoring system on large scale.
5. Proper knowledge on information/requirements gathering from users and experience of preparing Business Requirement Specifications Document (BRS) and System Requirement Specification Document (SRS).
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8. Extensive knowledge on Digital Certificate application, PKI and Cryptography.
9. Excellent drafting and reporting skills.
10. Excellent skills in communicating in English both verbally and in written form in a clear, organized and professional manner with all level of management.
11. Firm belief in teamwork and gender equality.
12. Availability to travel outside Dhaka if required.
13. Working experiences with World Bank funded projects will be an added advantage

#### **Selection Criteria and Process:**

The Specialist will be selected in accordance with the procedures set out in the World Bank's Guidelines: SELECTION AND EMPLOYMENT OF CONSULTANTS UNDER IBRD LOANS AND IDA CREDITS & GRANTS BY WORLD BANK BORROWERS JANUARY 2011 (REVISED JULY 2014). Any individual or firm (firm has to apply proposing its individual) may indicate their interest in providing the services. Interested specialists must provide information to substantiate that they are qualified to perform the services. Only the experience and qualifications of individuals shall be used in the selection process. If a firm applies proposing its individual, their corporate experience shall not be taken into account. Contract will be signed with the individual/firm, in case of any individual proposed by firm.

#### **Reporting and Co-ordination:**

The EMV Specialist will work in contact with General Manager of Payment Systems Department. The specialist will be required to prepare monthly summaries of work performed and cover issues or concerns that he/she foresees along with the possible solutions and submit the same to his supervisor.