

**Term of References  
For  
Technical Assistance and Advisory support for Procurement of EMV for AFD Pay Scheme  
Payment switch at APS**

Particular	Description
Position	Consultant services (Firm)
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Funding Agency	Payments Automation and Integration of Salaries in Afghanistan (PAISA) Project ID P168266 Grant No D4530AF
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## INTRODUCTION

The objective of the Payments Automation and Integration of Salaries in Afghanistan (PAISA) Project is to support the development of digital government-to-person payments in Afghanistan. There are four components to the project:

- The first component being Biometric identification system for civil servants and pensioners. This component will support the biometric registration and issuance of a unique registration number (URN) to recipients of government salaries and transfers, which will be managed by NSIA.
- The second component is the integration of the identification, verification and payment systems. The component will focus on the integration of various systems playing different roles in the salary payments, process to achieve full-fledged straight-through processing (STP). This component includes two subcomponents: integration of public financial management infrastructure with digital ID and payments ecosystems, and integration of the national payment's infrastructure with digital ID Infrastructure.
- The third component is the expansion of financial services and access points. This component aims to ensure that, with the shift to electronic payments, civil servants, including those hitherto paid by 'bonded trustees', and pensioners can either: (i) withdraw cash from their account from safe and convenient locations; or (ii) use their account balance to make cashless payments for goods and services.
- Finally, the fourth component is the project management. This component will be implemented by MoF and support the provision of resources to carry out the coordination, administrative, social and fiduciary aspects of the project. In line with new requirements at MoF, staffing needs have been estimated for the project life. This component will also finance the undertaking of surveys and other activities related to the monitoring of project outcomes.

The Payment systems play a critical role in supporting the financial and real economies. From a broader perspective, a less than optimal use of payment instruments and inefficient or poorly designated system to process these instruments may ultimately have an impact on systemic stability, economic development and growth. The Payment systems are moving from being a narrow channel for transferring funds to a much wider integrated network for transferring additional forms of value. The creation of networks and systems for retail payments can have a substantial role in supporting financial access in developing countries; and modern retail payment technologies an innovative program to channel recurrent payments efficiently can, and are already being used to, integrate the previously underserved and non-served population into the formal financial sector. A well-functioning infrastructure to efficiently and safely process modern payment instruments is necessary to adopt widespread use of modern payment systems.

A modernized national payments system is the cornerstone of the overall financial infrastructure in Afghanistan. Hence, in 2013 Da Afghanistan Bank procured and signed a

contract for supply and installation of national card and mobile payment switch dated August 18, 2013 with Banking Production Centre (BPC of the Netherlands under the World Bank funded Financial Sector Rapid Response Project (FSRRP) in Kabul and as per to the contract the national card and mobile payment switch was supplied, installed and implemented by BPC firm and APS office by end of 2015. Subsequently, the Service Level Agreement (SLA) for warranty services period was signed with BPC for support and maintenance of the national payment switch for three years (2017-2019) under FSRRP which has recently been completed by end of 31st December 2019; it is worth mentioning that in accordance to the technical requirements in original contract the APS payment switch need additional support and maintenance services during post-warranty period as well, which is part of the PAISA project procurement plan approved by the World Bank group for further process.

### **CURRENT STATUS OF APS**

Afghanistan Payments System (APS) was initially inaugurated and found by Pashtany Bank, BMA and Ghazanfar Bank in 2011, which subsequently other banks such as Azizi and Islamic Bank of Afghanistan also received its full membership. In 2013, APS as the National e-Payment Switch of Afghanistan, received funds from World Bank (WB) through Da Afghanistan Bank (DAB).

APS is now operating under the umbrella of DAB and is playing a leading role in developing and modernizing the retail banking market in Afghanistan by providing innovative electronic and mobile payment services that help in enhancing the retail banking offerings in the country.

APS is offering e-Payment services by establishing interoperability and interconnectivity in the banking and payments ecosystems for all the state banks, private/commercial banks, microfinance institutions, mobile money operators and payment institutions across the country. APS launched a Domestic Card Scheme named AfPay with debit, credit and prepaid functionalities, and DAB mandated all financial institutions in Afghanistan to integrate with APS for establishing interoperable payment eco-system in or outside the country.

APS functions as a coordinating body bringing together all the member participants, adapting an industry collaborative approach to define payment services, common operating procedures, service levels and standards, as well as representing its member banks and partners in the international card associations and networks, principally in relation to the national payments matters.

Besides being the National e-Payments Switch of Afghanistan, APS is the first and only institution in the country that provides shared platform for electronic fund transfers within the boundaries for all the financial institutions (including banks and mobile money operators), as well as the retail businesses and general public.

### **APSVision**

"To deliver a shared interoperable retail e-Payment infrastructure, which provides a low cost, multi-channel switch for e-Payment processing & switching, merchant acquiring, card services

and Mobile Financial Services for mutual benefits of all consortium members toward a cashless society”.

### **APS Mission**

“To proactively encourage e-Payment systems for ushering in a cashless society in Afghanistan and to ensure e-Payment systems in the country are safe, efficient, interoperable, authorized, accessible, inclusive and compliant with international standards”.

### **OBJECTIVE OF THE ASSIGNMENT:**

In order to prevent the prevailing use of cash that reduces the overall economic efficiency, to expand the e-Payment services, to make them accessible for the majority of the residents and to reduce the domestic card transaction charges; the National e-Payment Switch of Afghanistan, Afghanistan Payments System (APS), conceived and launched AfPay (the National Card Payment Scheme) as an alternative to other foreign card schemes that aimed at providing efficient, cost-effective, robust and ubiquitous payment solutions which allows all Afghan financial institutions including banks and Payment Institutions to participate in a Nationwide Electronic Payment Processing Domain.

The AfPay card which is owned by Da Afghanistan Bank and implemented by APS, has been brought into existence to tap into the tremendous growth witnessed by cards. The functionality of the product has been designed to enable banks to reduce the high costs of cash, cheque and manual and traditional processes. It also aids at convincing customers to access their funds at channels like POS and ATMs, other than bank branches.

The AfPay Card Scheme was initially introduced and used as magnetic stripe. In the early stages, considering the very fact that using cards for payment for daily transactions was significantly low, security and speed were not of crucial features of the payment cards. But as people have been stimulated to go digital and use cards as a means to make payments, particularly AfPay Cards, security of these cards is thought of paramount value and importance. Not just that, with the noteworthy upsurge electronic payment technology advancements through payment cards, synchronizing AfPay cards with the latest technological improvements in order to offer the most modernized and cost-efficient e-payment technologies in the country, is of significant importance to APS.

The National e-Payment Switch as the sole scheme manager of National AfPay Card Scheme, is indispensable to take necessary actions to upgrade the security of electronic payments using AfPay cards and also provision of room for growth of various payment services including Contactless, NFC, HEC and so on and so forth.

In this context, of considerably important measures, migration of National Payment Card Scheme from Magnetic stripe to EMV technology is our main priority. Technically, EMV technology plays an important role in increasing the level of safety of using payment cards for all types of financial transactions and also implementing various types of modern technologies

in order to increase the convenience of electronic payment services customers and to reduce the cost of using these services.

The migration from magnetic stripe to EMV chip indeed requires investment in changing the payment infrastructure and associated processes. Changes are required from the acquiring channels installed at retailers, through acquirer switches and networks, right up to issuer authorization hosts and card production systems.

Looking at the current situation of the Afghan market, the lack of experience and sufficient knowledge among those involved in the electronic payment sector, there is a dire need for skilled professionals in this very technical project implementation who have good experience in the implementing of projects similar to EMV technology in different countries.

Therefore, Da Afghanistan Bank, with close cooperation of World Bank, intends to hire an experienced consultant who has sufficient experience, for the successful implementation of EMV technology and in order to ensure the principled and standard implementation of the migration of the AfPay magnetic cards to chip-based technology and also help increase the capacity of specialized staff in the business, IT and operational departments of the Afghanistan Payments System (APS) and to further increase the quality of services related to the implementation of EMV technology through the National AfPay Payment Cards.

The following are the main objectives for hiring an EMV Project Implementation Consultant:

- Capture requirements, make solution designs and propose suitable infrastructure of Implementing EMV technology for Domestic Card of Afghanistan "AfPay",
- Be responsible for technical project management,
- Assist APS relevant teams in setting up new payment solutions and profiles,
- Provide APS with expert advice and support in EMV and payment related technologies,
- Stay up-to-date with relevant specifications and new payments initiatives
- Bridge new market knowledge in payments and mobile on EMV technologies to technical and functional staff of APS,

**Key Responsibilities Include:**

- Sharing subject-matter expertise in EMV technology through giving professional during the EMV implementation for Domestic Card scheme of Afghanistan "AfPay",
- Working together with Technical and functional team of APS on analysis, design, and implementation of EMV technology for "AfPay"
- Assisting in building the business through the development of innovative technology and business needs of EMV technology for the existing market of Afghanistan
- Designing the EMV technology Implementation project that addresses key market's needs in a sustainable way, aiming for capacity building and leveraging APS staff
- Leading and / or supporting the implementation of tasks to strengthen APS technical and functional resources on EMV technology for "AfPay"

- As needed, contributing to technical and functional staff knowledge management and learning agenda. These tasks could include conducting training, creating training materials, creating case studies and other materials for knowledge management.
- Developing a roadmap and technical plan to enable APS to utilize EMV technology implementation for “AfPay”,
- Overseeing and supporting the EMV technology implementation for “AfPay”,
- Researching global trends in product evolution and value-added services deployed through EMV technology synthesizing learning for APS staff,
- Researching successful EMV technology implementation around the globe and translating them into recommendations for APS,
- Developing appropriate tools to process reengineering and risk management of EMV technology for the national card scheme “AfPay”,
- Building and maintaining key relationships with APS international partners, such as BPC to ensure their support and collaboration in business roll-outs and implementation of EMV technology for “AfPay”,
- Ensuring APS’s leadership as an expert in the EMV technology by staying ahead of emerging issues, trends and opportunities during implementation of EMV technology for “AfPay”,
- Any other related task assigned by APS management,

#### **DURATION OF THE ASSIGNMENT:**

The EMV project Implementation consultant will be hired for the duration of one year. But as per need of the project, it may extend for the 2<sup>nd</sup> year.

#### **REPORTING:**

The EMV project implementation consultant will report directly to the Managing Director of APS.

#### **LOCATION/RESIDENCY**

The location/residency for the Advisor is considered to be at APS premises (Kabul, Afghanistan).

#### **SELECTION CRITERIA:**

- Strong Knowledge and specialization of EMV specification, payment scheme specification and relevant domains,
- Excellent experience in design and implementation of flexible, reusable and maintainable technical infrastructure of EMV technology for card schemes,
- Able to understand the business and technical needs of the financial market for implementation of EMV technology,
- Contactless/contact payment expertise. Experience of working with Master Card, Visa or other relevant EMV-based schemes,
- Deep understanding of global EMV industry trends and of emerging best practices and innovations,

- Knowledge of policy and legal/regulatory issues related to payment schemes around the globe,
- Extensive practical experience in the development of EMV based payment cards, mobile banking and other transformational electronic payments solutions.
- Experience in due diligence exercises for advisory engagements in emerging market financial institutions, MNOs or third-party payment providers.
- Experience in developing pilot environments, measuring success and learning lessons from them for future roll-out plans, in at least one project,
- Have at least Five years of technical/operational experiences performing hands-on EMV payment and relevant field,
- The education required is MCS, MBA (IT) or other relevant fields,
- Should be fluent in written and spoken English,

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