

## The BENEFIT Company Kingdom of Bahrain National Electronic Funds Transfer System



### Overview

5<sup>th</sup> of November 2015, The BENEFIT Company along with The Central Bank of Bahrain announced live operations of Electronic Funds Transfer System (E.F.T.S) provided by CMA Small Systems AB from Sweden.

EFTS is a multifunctional online retail payments system offering a range of funds transfer/collection services covering all of country's economic sectors from individual remittance transfers to government and large corporate institutions payments. The system greatly improves bill payment services for telecoms, government and municipal authorities, and other financial service providers.

EFTS as a nation-wide service operates in 24x7 mode with minimum downtime allowed to achieve a target of 99.99% availability per annum.

Major services offered by EFTS to public are as follows:

#### 1. **Fawri+**

Near real time (NRT) customer to customer secure funds transfer protected by the authorization of receiving party with immediate funds availability for end beneficiary within the predefined limit of 30 seconds.

#### 2. **Fawri**

Classic retail funds transfer with session based settlement in Bahraini's Real Time Gross Settlement (RTGS) system.

#### 3. **Fawateer**

Payment collections supported by Electronic Bill Presentment and Payment (EBPP), and eMandates modules within EFTS.

### Coverage

System's services are made available to participants from private and public sectors and can be accessed via banks'/billers' channels such as:

- Branch services;
- Internet banking;
- Mobile banking.

EFTS unites major retail banks in the Kingdom of Bahrain that directly connect to it via secure VPN channels as well as via major billers:

- Telecoms (BatelCo, VIVA, ZAIN);
- Government (EWA, Customs and others);
- Financial institutions (Bahrain Credit, American Express and others).

EFTS in its EBPP module maintains directory of billers and their services classifying all the billers by connectivity mode:

- Online;
- Offline.

### Design

EFTS is built around CMA's high performance payment transaction engine and contains the following configurable settlement services:

- Instant payment (named as Near Real Time, NRT) service;
- Deferred net settlement (DNS) service.

Instant payment service is a major function of EFTS system that allows participating institutions to provide their customers with online services for account transfers, bill payments, pre-paid account transfers, etc. Instant payment service includes immediate processing (IP) bill payments that are processed online and immediately.

All services in the system are available on 24x7 basis.

DNS service provides internationally-accepted session-based Clearing functionality for Direct Debit and Direct Credit instructions.

Final Settlement is based on settlement of multilateral net obligations for all types of services via online connection to Real Time Gross Settlement System (RTGS) of CBB and happens several times a day during RTGS business hours. EFTS utilizes concept of settlement agents to settle obligations of those participants who do not have settlement accounts in RTGS.

EFTS system provides Participants with:

- STP interface to maintain message-based payment and bill exchange process;
- WEB-based Monitoring interface.

Following plug-in modules enrich system functionality:

- Electronic Bill Presentment and Payment (EBPP) module;
- eMandates module;
- Fraud Detection and Management Module;
- Fees and penalties module.

**Electronic Bill Presentment and Payment (EBPP) module** acts as uniform centralized directory of billers and the services they publish to community, this information is available to participating institution via messaging interface and can be correspondingly published to end customers via public channels (mobile/WEB etc.). Customers can query their bills with online billers using real-time messaging as per query descriptors published by the biller services. Real-time caps on bills request/reply are applied to ensure real-time information availability. Alternatively bill payments, either single or multiple, can be initiated based on received bills information and based on predefined payment descriptors published by biller for its services. System will validate correctness of mandatory payment fields in relation to the services requested. All the information is stored centrally in EFTS database and available for reporting.

**eMandates module** supports direct debit payments allowing customers to have centralized storage and management of electronic mandates along with scanned copies of paper-based mandates which ensure secures digitally signed delivery of scanned mandate contracts.

**The Fraud Detection and Management module** provides automated fraud detection mechanism for payment processing. Detection of suspicious transactions can be performed either in online or in offline mode. It is possible to define detection rules for all Customers/Participants or for specific ones.

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Fraud detection is built around a rule-based concept against a set of conditions. These conditions can be configured by System administrator using administrative workplace.

Fraud detection module provides:

- Detection of fraud on arrival of a new payment/batch to the System;
- Issuing of an alert to system administrators or rejection of a payment when a suspicious payment is detected;
- Generation of a fraud detection incident and statistical reports.

**Fees and penalties module** provides system operator with advanced mechanism of fees and penalties collection and sharing. On one hand the module ensures that fee distribution between involved parties and penalties collection happens in a smooth and automated way, on the other hand it provides a flexible mechanism to offer attractive rates to promote electronic payments growth. Flexible distribution rules and several collection/distribution parties can be specified within given fee descriptor which will later be used during fee charge calculation. All the fees and penalties as per the defined configuration are presented for settlement at the end of each settlement session in RTGS system. Corresponding reporting mechanisms related to fees and penalties are available in the system.

## Security

EFTS is designed to provide payment and information exchange over secure private network with dual digital signatures approach including point-to-point security and complete traffic encryption.