

# 7 Information Technology Developments

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## 7.1 Overview

This year, upgrade of core Enterprise Resource Planning system was a major achievement of IT in SBP. Several business and technical objectives of the upgrade were successfully achieved. This upgrade was a part of the 3-Year Information Systems Strategy for SBP & SBP-BSC and was initiated in March 2013. To align with the developments on business systems side, technological infrastructural base of the Bank has also been augmented this year, with appropriate enhancements. Similarly, the protection of information assets of the Bank was beefed up during the year with the introduction of latest mechanisms to monitor and fix security issues proactively.

Another achievement of this year was consolidation of country-wide Globus related support mechanism into a central workflow solution using the SBP Service Desk system where all technical support related issues were being recorded and responded to/from one point that enabled prompt support in addition to providing the analysis capabilities related to Globus support areas. Similarly, Engineering Department's compliant management lifecycle was automated. That ensured swift system flow (without any ambiguity), granular reporting and analysis capabilities of Engineering related issues and tasks.

## 7.2 Business Systems Developments

The upgrade of Oracle systems achieved this year with very tight timelines and by utilizing internal resources of SBP. To minimize business-side disruptions the final round of upgrade was purposefully planned and executed between Eid-ul-Fitr and Pakistan Independence Day holidays. A rigorous training programme was administered to ensure smooth transition to the upgraded version.

A transformational project completed this year was straight-through processing for auction of Government securities where an interface between Globus Banking System and Bloomberg System was developed for online auction of Pakistan Investment Bonds and Market Treasury Bills.

ISTD played a key role in supporting the General Election 2013 process by completing a project of national importance namely Data Scrutiny System for Election Commission of Pakistan in record minimum time that ensured checking of loan related history of election candidates for any possible defaults. This system ran successfully during the nomination papers' filing and scrutiny phase of General Elections 2013.

In the prize bond area, new Bond of Rs 100 denomination was added to Globus Banking system while enhancement of prize money payment process through one window operation was also implemented in the system.

A notable achievement was NAB Convicted Person Information System developed to facilitate to maintain data storage/presentation application by NAB unit of BPRD. This covered the provision of information to NAB, circulation of information to banks/DFIs, MIS of willful default cases and circulation of freezing and de-freezing orders received from NAB u/s 12 of National Accountability Ordinance 1999.

Exchange Companies (ECs) Licensing System Phase-I was also developed this year which covered the MIS of ECs and Management and Employees information. In Phase – II, system will facilitate the

processes and MIS reporting about the Licenses, agreements and Anti Money Laundering issues related to ECs.

Cash Monitoring and On-site Examination was also automated this year. This system automated the process of Cash monitoring and examination at SBP-BSC field offices and commercial banks.

Web based SBP Employee Self Services software was also developed and launched this year to facilitate all employees to check their personal information with the Bank, performance history, salary history, loan details, and leave record. The system aimed to decrease the work load on HRD about the employees' queries regarding their above mentioned details. Moreover, Email notification functionality was added for 'Employee Payments' and 'End of Employments' activities. Using this functionality, an automated email is generated to notify the concerned stakeholders on payment(s) to an employee and End of Employment (in case of retirement, resignation, contract expiry etc) activity in HRMS. In addition to facilitating employees about relevant payment(s), if any; this functionality also addresses the risk related to unauthorized use of retired/resigned/expired employee system IDs.

Data Acquisition, Compilation and Presentation project was also done this year. This project is a major enhancement in the previous A-07 system. The new system acquires additional information on Investments, Total off balance sheet Exposure, Non-Performing Assets (NPAs) and Information on credit demand besides credit supply to provide not only analytical data but the required assurance to the policy making wing for appropriate amendments in the relevant policies.

### **7.3 Infrastructure Developments**

This year, the major focus of IT infrastructural area remained on the enterprise Windows based deployments. To cater to the growing data and file storage needs, enterprise class storage area network was revolutionized by implementing the latest storage technologies. Similarly, several server hardware equipments were replaced with the latest ones across the country to upgrade the services being provided to the enterprise users.

A major accomplishment this year was to strengthen and upgrade IT setup for SWIFT international payments system. The latest server hardware has been acquired and the installations are in progress. During 2012-13, the basic building block of entire IT setup of State Bank and SBP-BSC Offices i.e. the uninterrupted power was planned to be upgraded and the planning and acquisition phase has been finalized. Now the deployment of new UPS systems is in initiation phase that is expected to complete by mid next year.

### **7.4 Information Security and Assurance**

Email is the most important business tool used extensively by Pakistan financial and banking sector. Keeping in view the risks associated with clear text emails and to address ever increasing phishing threats, ISTD in collaboration with BPRD and PBA issued a circular for banking industry to implement industry standard protocol which ensures bank to bank email communication will be authenticated first at the email gateway level and later, contents of the message exchange will be encrypted.

This year, IT Security Division launched a vulnerability scanning system to identify and discover software vulnerabilities within IT infrastructure components (including in the SBP-BSC offices). By proactively identifying and fixing software vulnerabilities in a timely manner, the risk of Internet based cyber attack on SBP IT systems and network exploiting these vulnerabilities could be

minimized. Additionally, on the request of BID, ISTD also procured a well recognized commercial website scanning tool which will be used by BID during their inspection of banks.