



PRISM OPERATING RULES- 2018

Version 2.0

PAYMENT SYSTEMS DEPARTMENT
STATE BANK OF PAKISTAN

Table of Contents

ACRONYMS	2
1. DEFINITIONS	5
2. SERVICE AND GENERAL DUTIES	8
3. PARTICIPANT CATEGORIES	10
4. PRISM PARTICIPATION CRITERIA	10
5. SETTLEMENT ACCOUNT	12
6. TRANSACTION TYPES	13
7. BUSINESS SESSIONS	13
8. MESSAGE PROCESSING	13
9. QUEUE & PRIORITY MANAGEMENT	15
10. OPERATIONS OF THE SYSTEM	16
11. REVOCATION OF PARTICIPATION	17
12. FUNDS TRANSFERS BETWEEN THE PARTICIPANTS	17
13. SETTLEMENT OF NET CLEARING BATCHES:	19
14. GOVERNMENT SECURITIES TRANSACTION	19
15. INTRADAY LIQUIDITY FACILITY (ILF)	21
16. GENERAL ADMINISTRATION	22
17. DISPUTE RESOLUTION MECHANISM	23
18. CUSTOMER SERVICE / FACILITATION	24
19. FINALITY AND IRREVOCABILITY OF TRANSACTIONS AND SETTLEMENT	24
20. SERVICE BUREAU	25
21. EMERGENCIES	25
22. REPORTING TO SBP:	26
23. INTELLECTUAL PROPERTY PROTECTION	26
24. AMENDMENT OF RULES	27
25. STRAIGHT THROUGH PROCESSING (STP)	27

ACRONYMS

ACL	Access Control List
AML	Anti-Money Laundering
ATM	Automated Teller Machine
BCO	Banking Companies Ordinance
BCP	Business Continuity Planning
BSC	Banking Services Corporation
CFC	Customer Facilitation Centre
DFI	Development Finance Institution
DMMD	Domestic Markets and Monetary Management Department
DR	Disaster Recovery
DvF	Delivery versus Free
DvP	Delivery versus Payment
FIFO	First-in First-out
IBAN	International Bank Account Number
IFT	Interbank Fund Transfer
ILF	Intraday Liquidity Facility
IPS	Investor Portfolio Securities
ISD	Information Systems Department
IT	Information Technology
KYC	Know Your Customer
MNSB	Multilateral Net Settlement Batch
MT	Message Type
MTB	Market Treasury Bills
NIFT	National Institutional Facilitation Technologies (Pvt.) Ltd
OMO	Open Market Operations
PIB	Pakistan Investment Bonds
POS	Point of Sale
PRISM	Pakistan Real-time Interbank Settlement Mechanism

PSD	Payment Systems Department
PS&EFT	Payment Systems & Electronic Fund Transfer
PTCL	Pakistan Telecommunication Company Limited
RTGS	Real Time Gross Settlement Mechanism
SBP	State Bank of Pakistan
SGLA	Subsidiary General Ledger Account
STP	Straight Through Processing

PREAMBLE

In exercise of its powers under the section 6 and 23 of the Payment systems and Electronic Funds Transfer Act 2007 read with all enabling provisions in this regards, the SBP is pleased to issue revised PRISM Operating Rules (PORs) 2018 for the participation and operation of the PRISM (Pakistan Real Time Interbank Settlement Mechanism). Since issuance of these rules in year 2009 and in addition to rapid innovations, developments, business and technological transformations in PRISM (RTGS), it was essential to issue new PORs. The PRISM System is being operated by the State Bank of Pakistan under the supervision of Payment Systems Department, SBP, Karachi.

PRISM OPERATING RULES

1. DEFINITIONS

- i. “**Business Continuity Planning (BCP)**” means a state of uninterrupted business operations. This term also refers to all of the organizational, technical and staffing measures used to ensure the continuation of operations following a disruption to a service, including in the event of a wide-scale or major disruption.
- ii. “**Business day**” unless otherwise specified in these Rules, means any working day on which PRISM System is available for the PRISM Participants.
- iii. “**Clearing**” means the process of transmitting, reconciling and, in some cases, confirming transactions prior to settlement, potentially including the netting of transactions and the establishment of final positions for settlement.
- iv. “**Depo Account**” means a securities account at PRISM mapped with SGLA Account of Institution maintained with SBP BSC (Bank).
- v. “**Digital signature**” means a cryptographic process by which a PRISM message is signed with the sender's (remitter) private signature key so that the recipient (beneficiary) of the message with the corresponding public key can accurately determine that the message has been originated from the sender; and has not been altered since it was signed.
- vi. “**Direct Participant**” means an entity that has direct access to its settlement account maintained with SBP through dedicated PRISM applications, connectivity, terminals, and infrastructure etc.
- vii. “**Disaster Recovery (DR) Plan**” means a comprehensive plan to promptly restore mission-critical PRISM applications/services in the events of disaster.
- viii. “**DVP transaction**” means a securities settlement mechanism that links a securities transfer and a funds transfer in such a way as to ensure that delivery occurs if and only if the corresponding payment occurs.
- ix. “**DVF transaction**” means a transaction for the transfer of approved Securities under the PRISM without movement of funds from recipient of securities, whether for consideration or otherwise.
- x. “**End of a business day**” means the time of a business day when the host system ceases processing transactions for value on the same or that day, including any extension of time for the processing of transactions on that day which SBP may grant under these Rules.
- xi. “**Financial Institution**” means an institution as defined in the Payment Systems and Electronic Funds transfer Act 2007.
- xii. “**Front-end system**” means a front-end computer system including but not limited to

Operator Workplace, Controller Workplace, PRISM Web Interface, TMS/X Web Interface linked to the host system;

- xiii. **“Government Securities (GS)”** means as defined in PS&EFT Act 2007 i.e. any securities issued by the Government under any applicable law transferable by a book entry on a register or otherwise.
- xiv. **“Host system”** means an online computer system operated by SBP to conduct the PRISM operations, including any back-up on-line computer system by which SBP operates a real-time gross settlement system in accordance with these Rules.
- xv. **“Hair Cut”** means a risk control measure applied to underlying assets whereby the value of those underlying assets is calculated as the market value of the assets reduced by a certain percentage (the "haircut"). Haircuts are applied on a collateral taker in order to protect against the losses resulting from declines in the market value of a security in the event that said collateral is required to be liquidated.
- xvi. **“IFT(Interbank Fund Transfers)”** means funds transfers between the PRISM participants including fund transfers pursuant to cheque clearing and settlement.
- xvii. **“Intraday Liquidity”** Funds which can be accessed during the business day, usually to enable financial institutions to make payments in real time.
- xviii. **“Investor Portfolio Securities (IPS) Account”** means customer’s Account/Portfolio of investments in government securities.
- xix. **“Indirect-Participant”** means an entity which does not have direct access to the PRISM but has an account maintained with SBP BSC (KO).
- xx. **“Multilateral Net Settlement Batch (MNSB)”** means the offsetting of obligations between or among multiple participants to result in a single net position per participant.
- xxi. **“Non-Financial Message”** type is normally used by financial institutions to send information for which another message type is not applicable.
- xxii. **“Notice to Participants”** means a notice in writing issued by SBP to PRISM Participants;
- xxiii. **“PRISM”** means Pakistan Real-time Interbank Settlement Mechanism. The name of RTGS system in Pakistan is PRISM.
- xxiv. **“PRISM Administrator”** means the person who creates and deletes user of its front-end System.
- xxv. **“PRISM Backup Administrator”** means assistant of PRISM Administrator for creation and deletion of the users of its front-end system.
- xxvi. **“PRISM Dictionary”** means a file containing a complete list of all the direct/indirect PRISM participants.
- xxvii. **“Private Signature Key”** means the key in a key pair that is private to the person who

owns it and used only for the specific purpose of creating digital signatures for PRISM messages.

- xxviii. “**Processing location**” means the location at and from which the host system operates.
- xxix. “**Public key**” means the key in the key pair that can be publicly made known and used to verify the authenticity or integrity of PRISM messages.
- xxx. “**Repo Transaction**” means repurchase agreement transactions of government approved securities.
- xxxi. “**RTGS System**” means the real-time settlement of payments, transfer instructions or other obligations individually on a transaction-by-transaction basis for PRISM Participants.
- xxxii. “**SBP**” means State Bank of Pakistan.
- xxxiii. “**SBP BSC**” means SBP BSC Services Corporation.
- xxxiv. “**SBP Exchange Period**” means suspension of PRISM business day operations for the PRISM Participants.
- xxxv. “**Straight Through Processing (STP)**” means automation of transactions between PRISM and participants’ core banking/treasury systems.
- xxxvi. “**Service Bureau**” means a setup/contingency arrangement in SBP to facilitate direct PRISM participants in processing of their transactions that they were unable to process due to technical faults and/or communication failures.
- xxxvii. “**Settlement Account**” means an account which a participant has in PRISM and is used for different type of transactions as prescribed by the SBP.
- xxxviii. “**Start of a Business Day**” means the usual commencement time of a business day of PRISM operations.
- xxxix. “**Special Participants**” means a participant authorized to only send Net Clearing results position to the PRISM interface.
- xl. “**Sub-Participant**” means a financial institution that designates in writing another Direct Participant as its settlement agent for interbank funds Transfer / Government Securities.
- xli. “**Systemic Risk**” means the risk that the inability of one or more participants to perform as expected will cause other participants to be unable to meet their obligations when due.
- xlii. “**Third Party Fund Transfers**” mean fund transfers instructions processed via PRISM by the direct participants of their customers/acountholders.
- xliii. “**Transaction**” means an IFT, 3rd Party Fund Transfer, DvP, DvF transaction, or any other transaction which SBP may introduce from time to time through circulars for execution or settlement under the PRISM, unless otherwise specified.

- xliv. “**Transmit**” means to send by electronic medium via the host system to or from SBP or a participant, and “transmitted”, “transmitting” and “transmission” shall be construed accordingly.

2. SERVICE AND GENERAL DUTIES

- 2.1. SBP shall operate the PRISM system whereby facilitating the already declared direct participants in their daily fund transfers, settlement of clearing obligations, and settlement of government Securities.
- 2.2. A Financial Institution shall participate in the PRISM after due approval from SBP, upon which, the PRISM participant, as the case may be, shall pay joining and subscription fees and transaction charges as may be specified by SBP from time-to-time. The list of transaction charges along with timing for each payment instruction may be addressed through SBP’s Circulars /Letters/ Broadcasts etc.
- 2.3. SBP shall install, operate, maintain and upgrade the hardware and software comprised in the host system at the processing location. SBP may also require the participants to upgrade the hardware / software installed in their premises. SBP Team may at any time, inspect hardware / software installed at their premises.
- 2.4. A participant shall install, maintain, operate and upgrade one or more front-end systems which will allow the participant to perform their functions pertaining to the operations of the PRISM at their own expense after getting clearance from SBP.
- 2.5. Participants shall apply in writing to SBP to customize their front-end systems at their own expense to make adequate provision for interfacing messages generated by users of their systems for straight-through processing, after adequate testing of the system.
- 2.6. SBP may, by notice in writing issued from time to time, require a participant to make modifications to any of the functions or introduce one or more additional functions as it deems necessary for the proper and efficient operation of the PRISM. Adequate time depending on nature of modification will be given to participants for preparing for the change.
- 2.7. SBP and every participant shall, at their own expense, make use of telecom services provided by Pakistan Telecommunication Corporation Ltd (PTCL) or any other telecom services provider as may be notified by SBP in writing, to connect the front-end system of the participant with the host system.
- 2.8. SBP shall be responsible for the control, maintenance and security of the host system, application software used in the host system and the processing location of the host system.
- 2.9. Every participant shall be responsible for:
 - 2.9.1. The control, maintenance & security and access to the front-end system,

back-up system and communication lines within the premises used or occupied by the participant.

- 2.9.2. Providing the necessary business resumption and recovery measures (like setting up of Business Continuity Planning (BCP)/DR sites for PRISM and provision of Uninterrupted Power Supply at their main and back up sites) to ensure the continuity of operations of its front-end system and communication facilities.
- 2.9.3. Any work or servicing done or to be done to the front-end system and communication lines situated outside the processing location without interrupting the systems operations, and all costs connected therewith. Making adequate arrangements for the training of the Human Resources (Human & Technical) working on the front- end systems.
- 2.9.4. Maintaining / reconciling their settlement Account in PRISM and their accounts at SBP BSC Offices.
- 2.9.5. Operating the front-end systems as per the manual provided by SBP.
- 2.9.6. Processing all payments within prescribed PRISM time.
- 2.9.7. Extending STP outreach to branch-level.
- 2.9.8. Updating PRISM dictionary whenever received from SBP.

3. PARTICIPANT CATEGORIES

- 3.1. **Direct Participant:** All the Financial Institution shall be direct participant in PRISM. All such PRISM participants will have a direct connection and settlement account in PRISM and will be able to settle government securities transaction through PRISM Interface. They would be eligible for transferring funds through PRISM to Direct and Indirect Participants.
- 3.2. **Indirect Participant:** Indirect Participants will have a settlement account in PRISM but will not have a direct access/connection with PRISM. Their transactions would be processed manually by SBP BSC. Indirect Participant may request SBP to provide them view only access for monitoring their inflows of PRISM transactions subject to approval of SBP. The charges for view only access would be borne by Indirect participants as and when specified by SBP.
- 3.3. **Sub-Participant:** A financial institution that designates in writing another Direct Participant as its settlement agent for interbank funds Transfer / Government Securities transactions will be treated as a sub participant.
- 3.4. **Special Participants:** SBP may assign special participant status to any Financial Institution / Aggregator / Clearinghouse or any other entity at its own discretion. All those entities carrying out the functions of 'Clearing' may be treated as Special Participants. These entities will be authorized to only sending Net Clearing results position the PRISM interface. However, these entities would not be eligible for other types of PRISM transaction i.e. government securities transactions interbank and customer based transactions.

4. PRISM PARTICIPATION CRITERIA

- 4.1. Following categories of Institutions are eligible to become Direct Participant of PRISM:
 - a. All the Commercial Banks.
 - b. All the members of Clearinghouse.
 - c. Any other Institution meeting the minimum infrastructure requirements as may be prescribed by the SBP in writing from time to time.
- 4.2. An institution eligible to become direct participant of PRISM, shall comply with the following conditions in order to access PRISM system:
 - 4.2.1. Maintain a current account with the SBP BSC;
 - 4.2.2. Maintain Subsidiary General Ledger (SGL) Account with SBP BSC if applicable;
 - 4.2.3. Any other financial, technical or infrastructural requirement specified by SBP e.g.
 - i. Proof of maintenance of adequate liquidity including satisfactory track record of retaining Cash Reserve Ratio and Statutory Liquidity Ratio as per requirements of SBP.
 - ii. Proof of Funding Arrangements / Credit Lines with other direct participants, and/or adequate portfolio of government approved

fixed income securities.

- iii. Establishment of Central Processing Unit (CPU);
- iv. Proof of Primary/Backup Connectivity and Disaster Recovery and BCP arrangements. connectivity issues, Network line, PTCL landlines etc;
- v. Signing of Undertaking Form containing necessary terms and conditions.

4.3. An institution eligible for the PRISM participation shall apply for authorization as per the prescribed format to gain direct PRISM access. The necessary documents duly filled and signed must be sent to

The Director,
Payment Systems Department,
State Bank of Pakistan
4th Floor, Main Building,
I.I. Chundrigar Road, Karachi.

- 4.4. Authorization to access the PRISM may be accorded or declined to institution applying for RTGS participation on the basis of financial, technical or infrastructural assessment of institution and feedback of relevant stakeholders.
- 4.5. On authorization by the competent authority and completion of necessary documentation and operational clearances approval letter will be issued by SBP to institution indicating the type of membership, types of transactions allowed and facilities available etc. to it.
- 4.6. Procedure for processing PRISM membership applications:
 - a. Applicant will be required to formally apply for membership.
 - b. Internal assessment by PSD.
 - c. Feedback/comments from relevant stakeholders would be solicited.
 - d. Submission of case to the competent authority for approval.
- 4.7. Once approved, PSD will provide the Applicant complete pack including details of hardware, connectivity, safety & security protocols etc.
- 4.8. General types of Financial Institutions & Facilities available to Direct & Indirect Participants are tabulated below:

Transaction Type / Financial Institution Type	Direct Participants			Indirect Participants		
	Commercial Bank	Primary Dealer (excluding commercial Banks)	DFI	Investment Banks	Leasing / Modarabas	Exchange Companies
Bank to Bank Transfer	√	√	√	×	×	×
Securities Transactions (DVP)	√	√	√	×	×	×
Clearing Transactions	√	×	×	×	×	×
Third Party Fund Transfer transactions	√	√	√	×	×	×
ILF Eligibility	√	√	√	×	×	×
Discounting	√	√	√	×	×	×

All such PRISM participants will be required to have the infrastructural facilities, as specified by the SBP from time to time, to continue to be eligible for participation in the PRISM System.

5. SETTLEMENT ACCOUNT

- 5.1. Each Direct and Indirect Participant shall have a Settlement Account in PRISM. The balance in this Settlement Account will be the amount deposited in the current account maintained at SBP BSC Office(s) or as may be decided by SBP. For smooth operations of PRISM, participants will be responsible to maintain sufficient balances as required by SBP in their settlement account.
- 5.2. The participants' settlement account in PRISM cannot have a debit balance at the end of each business day.
- 5.3. SBP may allow the Participants the facility of "Own Transfers" in PRISM i.e. transferring funds from one regional current account to other regional current account of PRISM Participants.
- 5.4. The host system shall only process same-day value IFT transactions but it may accept forward-dated transactions of up to four business days in advance, which shall only be processed on their value date.

6. TRANSACTION TYPES

- 6.1. The processing for settlement or otherwise, as the case may be, of the following transaction types will involve the respective Settlement Accounts / Current Accounts of the PRISM participants.
 - 6.1.1. Inter- Participant Funds Transfers - MT 202
 - 6.1.2. Inter- Participant single Customer Transfers (3rd Party Funds Transfers – MT103
 - 6.1.3. Inter- Participant Multiple Customer Transfers -MT102
 - 6.1.4. Inter- Participant Securities Transfers:
 - i. Delivery vs. Payment (DvP)- MT 543 & 541
 - ii. Delivery vs. Free (DvF) - MT 542 & 540
 - 6.1.5. Intra Day Liquidity (ILF) transactions
 - 6.1.6. Own Account Transfers Transactions / Interposition -MT524
 - 6.1.7. Settlement of Multilateral Net Settlement Batches (MNSB) Transactions – MT971
- 6.2. The eligibility of a PRISM participant to undertake all or a subset of the above transaction types will be governed by its PRISM Participants type. SBP has a right to introduce / cancel any transaction types at any time as and when required.

7. BUSINESS SESSIONS

- 7.1. The SBP will operate PRISM as per pre-determined schedule during each day of operation. SBP may conduct discrete sessions of PRISM operations for specific functions and transactions and inform to the Participants through broadcast. Transactions not allowed in a specific period will be rejected and a cancellation / rejection message will be sent to relevant participants. Any changes to the schedule will be advised to the Participants well before time. However, SBP may in the events of any technical issues and as and when needed extend timings of a particular session. Business sessions include the following periods for the participants:

Exchange Period Morning: Participants can process / execute Inter-Bank/Participant, Inter-Customers, DVP and DVF transactions till the period remains available.

Exchange Period Afternoon: The Participants can process / execute Inter-Bank/Participant, DVP and DVF transactions till the period remains available.

SBP Exchange Period: No Participant can process / execute any transaction in this period. Only SBP can process / execute transactions in this period.

8. MESSAGE PROCESSING

- 8.1. PRISM System workplace shall provide facility for the creation, transmission, confirmation and cancellation of messages so as to enable

participants to carry out instructions to execute or cancel IFT or DVP transactions, or such other transactions as SBP may approve by notice in writing, under the PRISM.

- 8.2. Messages transmitted carrying instructions to execute DVP or DVF transactions under the PRISM shall be initiated by the seller and shall be confirmed by the buyer. In the case of DVP / ILF (repo transaction) with SBP, Participant's confirmation would be required as and when required.
- 8.3. Instructions for transactions pending matching, settlement or execution, including forward dated transactions before their value date may be cancelled either by the participant or by SBP.
- 8.4. The banks are required to use International Bank Account Number (IBAN) of the beneficiaries in case of MT 102 and MT 103 except in the transactions where SBP has exempted the usage of IBAN.
- 8.5. Already settled transaction cannot be cancelled.
- 8.6. Notwithstanding any provision in these Rules, participants shall not be able to cancel, through their front-end system, instructions for IFT or DVP transactions that are initiated by SBP.
- 8.7. Participants shall be responsible for putting in place adequate controls to prevent the unauthorized use of their front-end system and the unauthorized transmission of messages via their front-end system, and shall conduct regular audits to ensure that the integrity of their front-end system and message transmissions via their front-end system is maintained.
- 8.8. Participants shall be required to ensure execution of all transactions before activation of SBP Exchange Period, failing which additional charges may be levied as prescribed by SBP from time to time. In the case of time extension request of PRISM System, the remitting institution would also inform and seek consent of the beneficiary institution for transferring the funds or securities. The Cut-off timings for interbank settlement in PRISM System are fixed as prescribed by SBP. However, PRISM timings may be extended due to the following:
 - 8.8.1. Critical payments as determined by SBP
 - 8.8.2. Monetary Operations by Central Bank
 - 8.8.3. Technical Problem in System Software (SBP's connectivity, PTCL connectivity, Server side software (RTS/X and TMS/X))
 - 8.8.4. Delay in receipt of clearing files from NIFT
 - 8.8.5. Half yearly and Year- end Closing on 31st December & 30th June
 - 8.8.6. Any Other reason (extraordinary/unavoidable circumstances at SBP's end)
- 8.9. The following issues may occur at PRISM Participant's end:
 - 8.9.1. Inability to complete transactions within prescribed Timing due to

unavoidable / special circumstances

- 8.9.2. Connectivity issue at their end
 - 8.9.3. Technical problem in RTS/X or TMS/X at participant's end
 - 8.9.4. Configuration problem in Controller workplace
 - 8.9.5. Problems in STP integration software developed by Participant team should not usually be considered as a reason for time extension request. Only certain genuine cases may be considered by SBP.
- 8.10. In case of occurrence of any the above issues, the participant shall immediately report them to the PSD and request for time extension. Such requests will only be considered by SBP in special/unavoidable circumstance as described above. Such Participant may also inform the counterparty (recipient) about transferring of funds once time extension is granted, the charges may be levied on the remitting participant for transferring funds as and when approved by SBP.

9. QUEUE & PRIORITY MANAGEMENT

- 9.1. A participant shall manage its IFT payment queues under the PRISM via its front-end system by designating its IFT instructions to be transmitted according to the following priority levels.

Sr.	Level	Operations
1	0-3	SBP
2	4	Clearing
3	5-9	Transactions with SBP/ Clearing/DVP
4	10-99	Participants

- 9.2. Participants may change their priority levels before the payment instructions are settled. Participants can manage their IFT payment queues under the PRISM via their front-end systems by re-designating their queued transmitted IFT instructions to Priority Level they desire.
- 9.3. IFT instructions not settled immediately due to insufficient funds shall be placed in queue according to First-in First-out (FIFO) Principle.
- 9.4. The host system shall place IFT instructions initiated by SBP in queue at Priority Levels '5-9' and IFT instructions for cheque or cheque clearing settlement at Priority Level 4, but participants shall not be able to re-prioritize such instructions through their front-end system.
- 9.5. Messages transmitted for DVP transactions containing IFT payment shall be executed or settled at Priority Level 5. The messages for SBP shall be settled at Priority Level-1, however, participants will not be able to re-prioritize such

transactions via their front-end system.

- 9.6. SBP may assign different Priority Levels to IFT instructions sent by the participants to ensure smooth operations of the system.
- 9.7. IFT instructions placed in queue at Priority Level 10-98 may be re-prioritized by the participant who has initiated the transaction. Instructions placed at Priority Level '1-9' cannot be re-prioritized by the participant.
- 9.8. A participant whose instruction for fund transfer in favor of SBP in queue if remains unsettled after such specified time or times on any business day, such specified time or times being provided for in a Schedule provided to participant from time to time by SBP, shall be liable to pay interest / charges according to terms set out in Schedule, unless otherwise determined by SBP, and such interest / penalty charges shall be a debt due to SBP and be deducted by SBP from the Settlement Account of the participant.
- 9.9. IFT transactions still pending settlement in queues at the end of a business day shall be automatically cancelled by the host system. Each affected participant will receive a payment cancellation message for such transactions.
- 9.10. The system provides queue management algorithms to undertake gridlock resolution with an aim to smoothen settlement of transfer instructions in the queue. SBP may apply gridlock resolution algorithm at any time if it feels necessary to settle transaction in queue. Gridlock resolution mechanism may offset or reprioritize the queued transaction sent by participants before settlement. The transactions settled will be on gross basis after the gridlock resolution applied on such transactions.

10. OPERATIONS OF THE SYSTEM

- 10.1. SBP may issue a notice in writing to all participants or a class of participants requiring to log on their front-end system to the host system for such minimum period or periods of time on such business day or days as SBP may determine in the notice for the purpose of receiving transmitted messages and instructions, and the participants concerned shall comply with such notice. This may be addressed through PRISM Broadcast/Email etc.
- 10.2. Front-end systems shall provide online host enquiry functions for IFT, DVF and DVP transactions.
- 10.3. SBP shall have the sole discretion to provide, modify, withdraw such information as it may deem fit and may determine through the host system to participants enquiry function of their front-end systems.
- 10.4. Every participant shall appoint a PRISM Administrator, and a backup PRISM Administrator, whose duty is to create and delete users of its front-end system in coordination with ISD/PSD team by filling PRISM Form, and to define and maintain the security profiles of users authorized to have access to the system, including the right of access to front-end security components, and all user functions and facilities on the front-end system. Users and Participants in the host system will be added

/deleted by the PRISM Administrator in SBP. A list of all outstanding Government Securities issues would be available at participant's front-end system.

- 10.5. Participants may also be provided with other types of file/data maintenance functions/programs to be downloaded on their front-end systems as may be required for their operations.
- 10.6. The host system shall provide immediate and irrevocable settlement for all types of transactions conducted by the participants subject to fulfillment of conditions.
- 10.7. Subject to these Rules, the host system shall accept same-day-value transactions between the start of a business day and the end of the business day on the business day in which the transaction is for value or from such earlier time on a business day as SBP may by notice in writing determine. The forward transaction may be processed as and when approved by SBP.
- 10.8. The operating hours of the host system shall be during such times on such business day or days as SBP may designate by notice in writing.

11.REVOCATION OF PARTICIPATION

- 11.1. The SBP may revoke / suspend the membership of a PRISM Participant if it is satisfied that:
 - 11.1.1. PRISM participant is declared insolvent by the court of law, or in the course of being wound up or otherwise dissolved, whether in Pakistan or elsewhere;
 - 11.1.2. The terms and conditions of PRISM rules and other regulations have been contravened;
 - 11.1.3. SBP considers that it is in the public interest to suspend / terminate the PRISM participation of a specific participant;
 - 11.1.4. SBP may change/restrict the facilities/transaction types, available to a Participant type at any point of time.
 - 11.1.5. If Participant is merged with other participant or decision of moratorium is notified by the regulator / competent authority.
- 11.2. The State Bank shall not terminate PRISM participant without giving that institution an opportunity to be heard. Provided that the State Bank may, if an immediate systemic risk is involved, suspend the PRISM Participation without notice pending the final order.

12.FUNDS TRANSFERS BETWEEN THE PARTICIPANTS

- 12.1. The Settlement Account shall be used only for the transfer of funds among participants and between SBP and a participant, as the case may be, for IFT including interbank, inter customers, 3rd party fund transfers, the settlement of Cheque clearings on MNSB basis, ATM/POS transactions Government Securities transactions and such other transaction or transactions as may be approved by SBP under these Rules.

12.2. The IFT instructions of a participant for funds transfers from SBP shall be initiated by SBP. The IFT instructions of a participant for fund transfers to SBP may be initiated by SBP or such participant. Instructions for IFT, due from SBP, shall be transmitted by the host system on their value date. Instructions for IFT to SBP shall be transmitted by the host system on their value date at the start of the business day.

13.SETTLEMENT OF NET CLEARING BATCHES:

- 13.1. A Clearing System may be required to ensure net obligations settlement in RTGS system as and when required by SBP.
- 13.2. SBP shall settle the different Net Clearing batches sent by the NIFT / ATM Operators and authorized PSO/PSP in the system at such time or times on every business day as SBP may designate by notice in writing.
- 13.3. PRISM Participants having debit position and having insufficient available funds in their Settlement Account shall obtain funds immediately to settle their clearing obligations. PRISM Participants are bound to settle their clearing position within the timeline as prescribed in writing by the SBP from time-to-time.
- 13.4. Multilateral Net Settlement Batches (MNSB) are settled on all or none basis, therefore, participants have to maintain ample liquidity for settlement of their clearing obligations in order to help avert systemic risk in the interbank market. If clearing obligation is not settled by a participant to clear his debit obligation within 10 (ten) minutes after processing of a clearing batch, the charges may be levied on that participant as prescribed by SBP from time to time.
- 13.5. SBP may provide eligible PRISM participants with collateralized Intraday Liquidity Facility (ILF) to cover their clearing obligations subject to such terms and conditions as determined by SBP on a case-by-case basis.

14.GOVERNMENT SECURITIES TRANSACTION

- 14.1. PRISM Participants shall maintain, in accordance with such written directions as SBP may issue from time to time relating to the opening, maintenance, operation and closing of Depo accounts, a Depo account with SBP which shall be divided into the following Depo sub-accounts:
 - 14.1.1. Own Account: To be used by the participants for the settlement of securities owned by them.
 - 14.1.2. IPS (Customer) Account: To be used by the banks to hold and transfer securities on the behalf of customers

Classification of SGLA:

 - Account 1 for Own Account SGLA of Conventional Bank
 - Account 2 for IPS Account SGLA of Conventional Bank
 - Account 6 for Own Account of Islamic Bank
 - Account 7 for IPS Account of Islamic Bank
- 14.2. The Securities Balance of each sub account will be divided into following sub balances:
 - 14.2.1. Available Balance: The Government securities balances will be uploaded from participants' SGLA account with SBP in to this balance category. The

securities balance in this category will be available for the normal securities settlement operations between the participants including SBP. The balances in this category can be moved to restricted sub-balance by the participants.

- 14.2.2. **Blocked Balance:** The securities sub-balance in this category cannot be used for any securities settlement related operations by the participant. Once a trade is executed by the Participant, the security would be moved from the available balance to blocked balance and vice versa at any time during the business day.
 - 14.2.3. **Pledged Balance:** In case of locking/blocking any security, SBP may transfer a security from Available balance to Pledged balance.
 - 14.2.4. **Restricted Balance:** For availing ILF, a participant would be required to move Bank's own security from Available to its Restricted balance.
- 14.3. A participant may transfer Government Securities:
- 14.3.1. From its Own Account to any SGLA Account / IPS Account of another participant bank subject to the availability of the specified issue of Government Securities.
 - 14.3.2. From its IPS account to any SGLA Account / IPS Account of another participant bank subject to the availability of the specified issue of Government Securities.
 - 14.3.3. Intra-participant Security Transfers from own to IPS and vice-versa
- 14.4. SBP may affect any of the above transfers on behalf of the participant bank concerned where SBP is so authorized to do so, or it may affect any such transfer for the purpose of or pursuant to the exercise of its powers under any written law where the circumstances so require it.
- 14.5. Government Securities may also be transferred between SBP and a participant/ bank, between the SGLA Account of the participant/ bank and SBP, whether the transfer is accompanied by or free of payment under the PRISM. Where a transfer of Government Securities is between SBP and a PRISM participant, the instruction or message for the transaction shall only be transmitted by SBP.

Types of Government Transactions may include:

- Coupon/Return Payment
- Redemption Proceeds
- Sale and Purchase Transactions
- Inter-bank Repo Transactions
- Any other transaction allowed by SBP

- 14.6. A transfer of Government Securities through the PRISM shall be performed by making an appropriate entry in the applicable Depo account of the participant bank affecting the transfer, and in the applicable Depo account of the participant bank

receiving the transfer of Government Securities.

- 14.7. Once the member bank who has transmitted DVP instruction either to buy or sell Government Securities and this instructions has been matched by the counter party and has sufficient balance in its settlement account (buyer of securities) or securities in its Depo Account (seller of securities) , the host system shall effect a DVP settlement of the transaction by immediately and irrevocably debiting and crediting funds from settlement account of the buyer and securities from Depo account of the seller.
- 14.8. In case, the buyer of the securities does not have sufficient funds, this DVP transaction will remain in queue unless cancelled by the participant before settlement.
- 14.9. In case, the seller of the securities doesn't have sufficient securities, this DVP transaction will remain pending unless cancelled by the participant before settlement.
- 14.10. The Delivery Vs Free Transactions (DVF) between the participants will be executed immediately, subject to the availability of sufficient government securities in delivery agents' portfolio.
- 14.11. PRISM participants may carry out Government Securities transactions either on their own account or on behalf of their customers.
- 14.12. Instructions for Government Securities transactions placed in queue, except those involving SBP, may be cancelled by any PRISM participant who is party to the transaction.
- 14.13. Government Securities transactions which, at the end of the business day on which the transaction is for value, are still pending settlement in queues or pending confirmation by the PRISM participant to which Government Securities (GS) are to be transferred, shall be cancelled by the host system and SBP shall make available, through the host system, to each affected PRISM participant (including the counterparty) a report listing the GS transactions of that PRISM participant which were cancelled at the end of that business day.
- 14.14. PRISM Participants are advised to follow the 'shut period' instructions and hence transactions of securities maturing during shut period will not be allowed.

15.INTRADAY LIQUIDITY FACILITY (ILF)

- 15.1. Intra-day liquidity Facility against the collateral of approved Government Securities transferred with SBP shall be made available to the eligible PRISM participants as determined by SBP from time-to-time. The Participants would transfer securities from their available to restricted balance.
- 15.2. The ILF Facility will be made available only on intra-day basis and all PRISM participants will have to buy-back Government Securities and to return any amount availed under this facility 15 (fifteen) minutes before the end of each business day.
- 15.3. If ILF buy-back is covered against Reverse Repo Ceiling Facility, OMO Injection etc.

the participant would be required to inform SBP 30 (thirty) minutes before end of day of each business day.

- 15.4. SBP after receiving ILF requests from PRISM direct Participants will immediately transfer ILF eligible Securities from participant own portfolio to SBP's ILF portfolio.
- 15.5. ILF Request by Security: Participant shall request for ILF against their portfolio of securities (MTBs/PIBs) maintained in their 'Own Account'. SBP after adjusting any applicable hair cut/margin (if any), may credit funds in participants' Settlement Account in PRISM. The charges may be levied on ILF as and when required by SBP.
- 15.6. All ILF transactions that remain unsettled means transferred securities not bought back by the participant will be automatically recovered back by the system at the end of the day, subject to the availability sufficient funds in Participants Settlement Account. SBP will have the right to redeem any securities it acquired through ILF operations and may apply additional penalties on ILF transactions that remain unsettled by the participant due to insufficient funds in Participants Settlement Account.
- 15.7. In case a participant is unable to return funds received against ILF, approval from SBP is required for overnight borrowing Reverse Repo Ceiling Facility. The Charges / markup for this facility may be prescribed as and when required by SBP.
- 15.8. An agreement may be signed with SBP for providing a right to set off as and when required by SBP, so that its claims against collateral provided to it by a participant should have priority over all other claims.
- 15.9. Request for Reverse Repo Ceiling Facility: Participant may send request for such Facility as per specified time (currently by 4:30 pm) by issuing order to sell securities using option of Reverse Repo Ceiling Facility. In case a participant is unable to return funds received against ILF, SBP may consider it as overnight borrowing and may levy Reverse Repo Ceiling Facility Charges and additional penalties. All Reverse Repo Ceiling Facility transactions will be routed to the concerned departments of the SBP and after receiving its authorization from the concerned SBP department, participants settlement account in PRISM may be credited accordingly.

16.GENERAL ADMINISTRATION

- 16.1. All PRISM direct participants shall have to use digital signatures as a security procedure for the transmission of messages and instructions under the PRISM.
- 16.2. All the direct participants shall put in place adequate measures for averting cyber threats and protecting against malware by carrying out frequent IT Security Reviews, Penetration Testing, and Malware Scans.
- 16.3. SBP shall be the certification authority of the private and public keys of participants under the PRISM, and shall perform the functions, be charged with the duties, and be vested with and exercise the powers that are accorded to a certification

authority in accordance with the relevant law.

- 16.4. A digitally signed and authenticated message once transmitted by a participant with its public key shall be deemed to have been transmitted by that particular participant and neither that participant nor any other participant shall be entitled to dispute occurrence of the message.
- 16.5. The authority of the participant or its official in transmitting the message or instruction, or the accuracy or integrity of the message or instruction in any claim before or proceeding in a court of law or any action taken under these rules arising from any transaction under the PRISM except in cases where participants are unable to process payments via their front-end system due to any technical failure and captured their payments using service bureau at SBP, and has signed and stamped /sealed their transactions on paper. In Such cases, the paper transactions will be considered as authentic as PRISM message.
- 16.6. Where SBP as the certification authority of the private key and public key of a participant has revoked the private key of the participant at its request or by SBP at its own discretion, all messages or instructions transmitted by and signed with the private key of that participant prior to the revocation but pending authentication by the host system shall be rejected by the host system in the authentication process, but any such message or instruction which has been authenticated by the host system before the private key was revoked shall be and remain irrevocable as far as the SBP is concerned, subject to these rules.
- 16.7. It may be noted that participant should not unnecessary change configuration of Operator/Controller workplace (or equivalent STP client software) and Windows operating system.
- 16.8. SBP will also participate in the PRISM System and will also act as an Authorized 3rd Party. As an Authorized 3rd Party SBP can debit and credit any settlement account in PRISM under the powers vested in SBP Act 1956, and Banking Companies Ordinance 1962 and any other law for the time being in practice.

17.DISPUTE RESOLUTION MECHANISM

- 17.1. In case of any unwarranted situation or disputes arising between any direct / indirect /special participants, these shall be immediately reported to PSD along with necessary information / documents and logs. Upon receiving such requests, PSD may initiate investigation that may involve review of participant's previous logs, Participant's Treasury staff and other concerned stakeholders etc. However, SBP shall not be responsible for any losses incurred by participants in the advent of such events.
- 17.2. SBP shall not be under any duty to determine any claim in case of a dispute arising among two or more participants, or between a participant and its customer or the customer of another participant, or between participants, arising from or pertaining to any transaction executed or to be executed, settled or to be settled, under the PRISM, including any claim that funds or Government Securities held by a participant are security for a debt or liability or held on trust, or any claim to having taken a security over, or having a beneficial interest

in or lien over, funds or GS held by a participant. SBP shall neither interfere with, nor adjust or modify the operation of the PRISM, or reject any message or instruction, or reverse any transaction to give effect to or uphold any claim, if the transaction may otherwise be executed or settled under these Rules.

18. CUSTOMER SERVICE / FACILITATION

- 18.1. All the direct members have to set up customer facilitation centre (CFCs) for handling complaints pertaining to PRISM transactions. The details of customer facilitation centers concerned, persons and contact numbers have to be conveyed to SBP and displayed by the participants on their website and in branches.
- 18.2. SBP has a right to levy penalties in case of violations of any conditions of these rules or any other guidelines issued by SBP from time to time. SBP has the regulatory mandate to frame additional guidelines / amendments to the existing ones as and when required.

19. FINALITY AND IRREVOCABILITY OF TRANSACTIONS AND SETTLEMENT

- 19.1. All transactions in PRISM will be deemed settled / executed by the System and will be considered irrevocable if an entry has been passed in the settlement account of both parties and a debit (MT 900) and a credit confirmation (MT 910) have been generated by the PRISM System after the execution the transaction.
- 19.2. All transactions executed or settled under the PRISM shall be final and irrevocable in so far as the SBP is concerned. SBP or its officers shall not be responsible with regard to the legality, validity or enforceability of any transaction executed or to be executed, settled or to be settled, under the PRISM, or whether any such transaction or the underlying contract connected with such transaction is void or voidable.
- 19.3. SBP shall be entitled to assume that all transactions executed or to be executed, settled or to be settled, are legal, valid, enforceable and have been properly verified by the participants and SBP shall be under no duty to reject, reverse, rectify, adjust or modify any transaction by reason that it was void, illegal, invalid or unenforceable, if the transaction may otherwise be executed or settled in accordance with these Rules.
- 19.4. SBP shall not be under any duty to any participant to reject, reverse, rectify, adjust or modify any transaction executed or to be executed, or settled or to be settled, by reason of any defect, forgery, theft, discovery without authority, failure or unauthorized copying, of any software, digital signature, private key or public key, password, code or secret number, or any combination of them, assigned to or designated by a participant or SBP.
- 19.5. No participant shall challenge the validity of any transaction executed or settled under the PRISM on the grounds that the transaction was not executed or settled pursuant to or accompanied by a formal or paper-based instrument of transfer deal,

or was not evidenced in writing on paper, or was not attested to by the handwritten signature of any person.

- 19.6. All figures posted to the Settlement Account, Own Portfolio, Customer Portfolio of a participant as indicating the amount of funds or Government Securities, as the case may be, credited, debited or in balance in the respective account, shall be deemed to be final and conclusive evidence of the transaction. Participant may be issued the different account and SGL statements generated by the internal applications of the SBP reflecting all transactions settled in PRISM.
- 19.7. Each day at the start of business operations, PRISM system would extract Funds and securities balances from the accounts in core banking system maintained with SBP BSC.
- 19.8. If a participant reports any mismatch in account statements issued by SBP BSC and PRISM, and if the occurrence of such mismatch is confirmed, SBP shall request SBP BSC to adjust the figure in the affected account by entering another transaction within such time as is reasonably practicable provided that in no circumstances shall SBP make any rectification of any posted figure if such rectification may prejudice or adversely affect the interest of any customer of the participant, the interest of any other participant or its customer, or the interest of SBP, or prejudice the finality and irrevocability of transactions executed or settled under the SBP.

20.SERVICE BUREAU

- 20.1. In the event of any technical fault or communication failure, SBP shall offer Service Bureau Facility whereby allowing the direct participants to process their transactions. However, SBP strongly recommends that participants restrict service bureau usage by ensuring readiness of their primary and backup connectivity at both Primary and DR sites.
- 20.2. The charges may be levied on participants availing service bureau facility as and approved by SBP.

21.EMERGENCIES

- 21.1. In the event that, for any reason, a front-end system is unable to communicate with the host system or is shut down, or the host system is shut down, or there is any interference with or interruption to the operation of the PRISM due to any cause whatsoever, IFT, Customer transfers, cheque and GS transactions which would otherwise be carried out under the PRISM shall be carried out by SBP BSC manually or in accordance with such procedures and facilities as SBP may from time to time or at the material time by written circulars or directions provide, and the participant or participants concerned shall comply with such circulars or directions.
- 21.2. In events of emergencies, SBP has the right to accept or reject the transactions or types of transactions as may be decided by it.

22.REPORTING TO SBP:

- 22.1. SBP may, from time to time and at any time, require any participant to furnish any information pertaining to any transaction executed or to be executed or settled or to be settled, under the PRISM, and participant concerned shall furnish the information accordingly.
- 22.2. A participant which furnishes any information shall ensure that such information is correct and accurate. Further, it is the responsibility of every PRISM participant to comply with all the applicable KYC/AML requirements

23.INTELLECTUAL PROPERTY PROTECTION

- 23.1. Intellectual property rights, including copyright, design and patent rights, in all application software used in connection with the PRISM and vested in SBP shall remain inviolable at all times, and no participant shall, without the written consent of holder of such rights:
 - 23.1.1. Modify or make a copy of any such software;
 - 23.1.2. Transfer, sell, lease or license any such software to another person;
 - 23.1.3. Apply or use any such software for purposes other than the PRISM unless permitted by these Rules; or
 - 23.1.4. Permit any other person in its employment or otherwise under its control to do any of the above.
- 23.2. Where a participant is a member institution, SBP may issue to such participant a letter providing that certain provisions in these rules shall not apply to such participant to the extent that the provisions pertain to the installation, operation, maintenance and upgrading of one or more front-end systems.
- 23.3. A letter issued by SBP under above rule may be subject to such terms and conditions as SBP considers appropriate.
- 23.4. Where in any action, suit or proceeding between SBP and a participant, computer output is tendered by SBP as to any message or instruction transmitted or any transaction executed or settled under the PRISM, or as to any computer software used in the host or front-end system, including digital signatures and security software, or as to the operation of any such computer software in the PRISM, the participant and SBP hereby expressly agree by this rule that neither the authenticity nor the accuracy of the contents of the computer output shall be disputed to be treated as the evidence as described in the Electronic Transactions Ordinance 2002.
- 23.5. Where in any action taken by SBP under these rules, computer output is tendered by SBP as to any message transmitted or any transaction executed or settled under the PRISM, or as to any computer software used in the host or front-end system, including digital signatures and security software, or as to the operation of any such computer software, all participants and SBP hereby agree that such computer output shall be admissible in the action and no participant shall dispute the authenticity or the

accuracy of the contents of the computer output.

24.AMENDMENT OF RULES

- 24.1. SBP may, from time to time and at any time, amend these Rules by deletion, substitution or addition, and where any amendment is made, shall give all participants notice in writing of the amendment (“Notice of Amendment”) at least 10 (ten) days before the day the amendment becomes effective and binding.
- 24.2. SBP may make any amendment to these Rules to become effective and binding upon all participants at any time if SBP determines, at its discretion, that exigent circumstances exist which require that such amendment become effective for the protection of SBP, national or public interest, public security or safety or for the participants to comply with legal or regulatory requirements, provided always that this Rule shall not apply to any amendment which would have the effect of rendering transactions settled under the PRISM no longer final and irrevocable.
- 24.3. If SBP receives any complaint from a participant that any figure shown in account statements generated by system other than PRISM is incorrect and doesn't match with PRISM figures, SBP may review and reconcile the figures with PRISM. If SBP finds that the figure is incorrect, SBP shall adjust the figure in the affected account by entering another transaction within such time as is reasonably practicable provided that in no circumstances shall SBP make any rectification of any posted figure if such rectification may prejudice or adversely affect the interest of any customer of the participant, the interest of any other participant or its customer, or the interest of SBP, or prejudice the finality and irrevocability of transactions executed or settled under the SBP.

25.STRAIGHT THROUGH PROCESSING (STP)

- 25.1. It is mandatory for the PRISM direct participants to implement STP for automating transfer of transactions between PRISM system and their core banking /treasury systems. For STP implementation, the direct participants shall, however, ensure adherence to and meticulous compliance of STP technical guidelines issued by SBP.
- 25.2. Implementation of additional biometric-based user login in core banking system along with conventional user/password mechanism. For network security and database security, it is advised to use latest software with configurable ACL (i.e Access Control List)
- 25.3. Integration software machines to be secured with proper ACLs behind Perimeter firewall for traffic between RTGS Client (Controller, Adapter or RCCC) and Integration software machine.
- 25.4. Securing Bank's Core server behind Core Firewall for traffic between integration machines to core server.
- 25.5. A dedicated server (Integration Machine) must be placed in between Bank's

Application Server and RTGS Client. Integration Machine is the only authorized machine to receive the data from Bank's end application server(s) and then it may forward to RTGS Client Machine.

- 25.6. The data transfer to/from Integration Machine must be secured and Access rules should be in place at Firewall end. Encryption or any other mechanism may be used for securing data transfer. No other machine should be allowed to send / receive data to / from RTGS client machine. Shared folders (if used) should be properly secured and unauthorized access should be prevented. Banks will be responsible for data security in their own premises.
- 25.7. SBP will not be responsible in case of any issue in the STP integration mechanism developed by the bank. Maintenance of this mechanism will also be sole responsibility of the bank.
- 25.8. Banks to avoid connecting internet devices and running/installing unnecessary applications on RTGS/STP workstations, and carryout frequent virus scans.
- 25.9. Access to RTGS client machine should be restricted and only authorized person can perform transaction input/authorization. Usage of USB on RTGS client machine should be restricted and only done in case of exporting transactions for using service bureau at SBP. This USB should be dedicated and should not be used for any other purpose.
- 25.10. Enabling appropriate network security checks at router-level to prevent any unauthorized access attempt.
- 25.11. User rights must also be defined along with the roles of Operator and its Authorizer to deploy dual checks for the security of transactions at Bank's application level.
- 25.12. The banks should have proper procedure for Input /Verification of the transactions. These procedures should be fully compliant with bank's own I.T Risk & Security Management policy.
- 25.13. Original signed customer request form must be validated.
