

IT Modernization Project

1. IT Modernization Project 2012
2. DoP IT 2.0
3. Project Arrow
4. DARPAN
5. Nanyatha
6. Symantec Antivirus
7. Active Directory
8. Email Solution

1. IT Modernization Project 2012

IT Modernization Project of Department of Posts is a project approved by the Government of India [Cabinet Committee on Economic Affairs (CCEA)] on 22nd November 2012 as Mission mode e-governance Project with an outlay of Rs.4909 Crore aiming at transforming the Department of Posts' operational efficiency and improving service delivery of operational and administrative units through upgraded technology and connectivity.

- **Segments of the IT Modernization Project India Post:** -
 - The implementation of the India Post IT Modernization Project started in the year 2012-13 in 8 segments.
 - The Eight Segments of India Post IT Modernization Project of India Post are:
 - 1) The Primary Data Centre Facility (DCF) at Navi Mumbai
 - Disaster Recovery Centre (DRC) at CEPT, Mysuru
 - 2) Change Management (CM)
 - 3) Network Integrator (NI)
 - 4) Financial System Integrator (FSI)
 - 5) Core System Integrator (CSI)
 - 6) Rural System Integrator (RSI)
 - 7) Rural Hardware (RH)
 - 8) Mail Operations Hardware (MoH) stream
 - National Institute for Smart Government (NISG) Executives & Circle Project Monitoring Unit (PMU) and Circle Monitoring Committee (CMC) will oversee the major projects like CBS, CSI, DARPAN, etc in IT Modernization Project India Post.



8000661414



/basicpay



@basicpay



/basicpay

Details of 8 segments of IT Modernization Project: -

1. Change Management:-

- ❖ Implementation Started on : 15-Oct-2012
- ❖ Completed on : 2015
- ❖ Vendor - TCS (Tata Consultancy service)
- ❖ Role :
 - It is least cost segment of IT Modernization Project
 - Capacity Building and Training of all employees (both GDS & Departmental employees) in Post offices in IT environment
 - Training is given in the Work Place Computer Training Centre (WPCTCs) in the respective Divisions.

2. Data Centre Facility (DCF):

- ❖ Vendor : Reliance
- ❖ Role :
 - Maintenance of Primary Data Centre of India post at Navi Mumbai that started on 03-April-2013
 - Disaster Recovery Centre (DRC) at PTC, Mysore that started on 15-May-2015
 - Connectivity & related Hardware will be provided by the NI vendor.
 - The Primary DC will also house the Department's Network Operating Centre (NOC), which will be managed by NI.

3. Financial System Integrator (FSI)

- ❖ Vendor : Infosys
- ❖ Implementation Started : 28-Sept-2012
- ❖ Role :
 - The FSI vendor will implement the Core Banking Solutions (CBS)/Finacle for POSB and Core Insurance Solution (CIS)/McCamish for PLI & Enterprise Content Management System (ECMS) in all Post Offices and provide Multiple delivery channels- internet, Interactive Voice Response (IVR), Mobile, ATM & SMS.
 - Maintenance of Core Banking Solution (CBS): (25,110 Offices rolled out as of now rolled out),
 - Core Insurance Solution (CIS): (25,406 offices rolled out as of now),



8000661414



/basicpay



@basicpay



/basicpay

- 1000 ATMs (Automated Teller Machine) rolled out as of now. Management of DOP ATM has been handed over to IPPB w.e.f. 30.08.2022
- Cash management in Post office ATM and cash loading is done by AGS (vendor).
- However, presently cash about the post office will be placed in the ATM, duly making a relevant entry in Finacle.
- Toll free number is 1800 266 6868 for ATM/ debit card, mobile/ internet/ SMS banking related grievances.
- General India Post Toll-free Number is: "1800 266 6868."
- ATMs are made interoperable with Banks w.e.f. 30-Dec-2016,
- Intra operable Internet Banking w.e.f. 14-Dec-2018.
- Mobile Banking w.e.f. 15-Oct-2019.
- NEFT was deployed w.e.f. 18.05.2022
- RTGS was deployed w.e.f. 31.05.2022 with IFSC – IPOS0000DOP

4. Core System Integrator (CSI)

- ❖ Implementation started on 15-April-2013.
- ❖ 505 RMS & Postal (out of 511 Division) + 12 Independent HO/GPO Rolled out into CSI as of now.
- ❖ Vendor : TCS
- ❖ Highest cost segment of IT Modernization Project.
- ❖ Role :



- Implementation of the solutions for Mail Operation, Retail, logistic Post, Philately, Finance, and Accounts & Human Resources and integration with other SIS (System Integrators)
- POS, Daily Account, Call Centre, Help Desk, HR (Employee portal) & F&A, Mail (DPMS & IPVS, & Logistics, Business Process Management & Workflow, Business Intelligence, Brain of the Postal System which integrates all System integrators (SIs)
- In short, CSI is connecting (integrating) other System Integrators (SIs) in India Post IT Modernisation Project

5. Rural Hardware (RH)

- ❖ Vendor : TCIL (Telecommunications consultant India Ltd.) Further operated by vendor RICOH now taken over by MINOSHA India Pvt Limited
- ❖ Role:

 - Hardware & Network provision to BOs



8000661414



/basicpay



@basicpay



/basicpay

- Rural Hardware includes Hand Held (HH) Device, Smart Card Reader, Solar Panel, Battery with Backup, Thermal Printer, Biometric Reader, SIM Card, Charger for the device.
- 5% Buffer stock of inventory (devices) will be maintained at Divisional Levels to ensure immediate replacements in case of faults in hardware.
- 1,29,847 BOs have been rolled out into DAR PAN as on now

6. Rural System Integrator (RSI): -

- ❖ Vendor : Infosys
- ❖ Role:
 - BO software maintenance.
 - Maintenance of Various application for the rural device.
 - Now SIM Based 5G mobile is used as DAR PAN Device which is working on SURE MDM. Earlier it was being used SOTI MDM.

7. Network Integrator (NI): -

- ❖ Implementation Started : 28-Sept-2012
- ❖ 26,643 offices has been connected on WAN
- ❖ Vendor : Earlier Sify, Now BSNL.
- ❖ Role:
 - Providing connectivity for each Departmental Post office location to ensure uninterrupted network connectivity through one single Wide Area Network (WAN) and connection to Data Centre.
- ❖ Role:
 - The sequence of Flow of Network is:
 - BSNL Exchange>Modem>Router>Switch>PC
 - The Routers of HP make are used in DoP offices. Juniper Switches are used in DoP offices. Modems of Team Link are used.
 - There are two types of Network Service Provider (NSP)
 - NSP-1 : BSNL
 - NSP-2 : Sify



Basic Pay

8. Mail Operations Hardware (MoH): -

- ❖ Vendor : Earlier DGS & D. At present it is known as GeM.
- ❖ Role:
 - Provision of Hardware (computers, UPS, barcode scanners, weighing scales, tag printers, Printers, etc.) to Mail office (RMS) and handheld devices (smartphones) to postman staff in post offices



8000661414



/basicpay



@basicpay



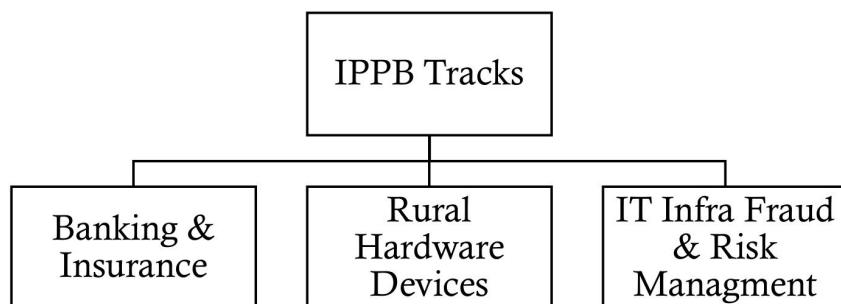
/basicpay

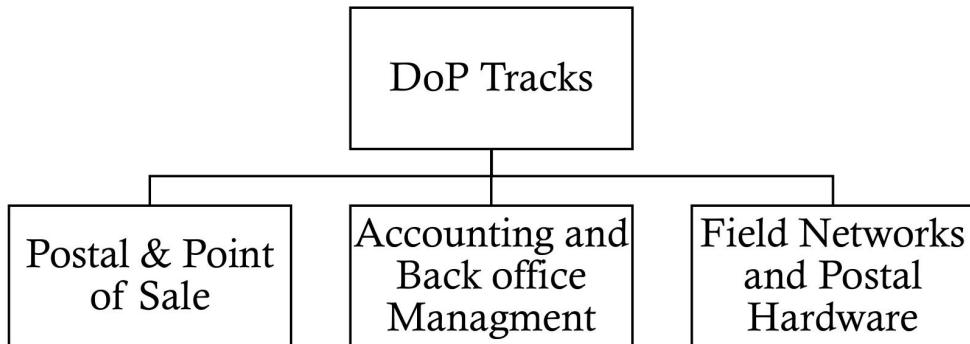
2. DoP IT 2.0

- Cabinet has approved IT Project 2.0 on January 19,2022. For an outlay of Rs.5785 Cr. to be incurred for a period of eight years from 2022-23 to 2029-30
The details of year wise expenditure incurred under IT Modernization Project from FY 2015-16 till date are as below –

Year (FY)	Expenditure (Rs. In Crore)
2015-16	307.19
2016-17	188.41
2017-18	415.63
2018-19	375.32
2019-20	384.68
2020-21	802.02
2021-22	765.33
2022-23	1087.48
2023-24 (so far)	445.41

- Dual structure needs to be avoided and only India Post Payments Bank to be used for Banking, Insurance and other financial need.
- Core Postal Operations should be the domain of DoP and rest of operation should be merged with IPPB for providing a more integrated inclusive financial and other services to the customers.
- Steering Committee empowered to modify the financial and physical parameters of the project which does not lead to substantial change in scope.
- Transition Decisions – Decision made by the Steering Committee of Ver 1.0 to transfer the contract management of to IPPB for the following –
 - DATA CENTRE: - The data centre facility after the expiry of the current contract w.e.f. April 1,2022
 - NETWORK: - Network Integrator after the expiry of the current contract w.e.f. April 1,2022.
 - BANKING AND INSURANCE: - Banking, Insurance and AML after the expiry of the current contract w.e.f. 29.08.2022





Project Steering Committee: -

- Sanction all project under DoP IT 2.0 including contract cost.
- Revise the estimates under the overall outlay approved by the MoF.
- Flexibility to modify the financial and physical parameters of the project which does not lead to substantial changes in the scope.
- Monitor and review the implementation of the project and ensure timely completion.

Technology Advisory Group: -

- Advice the DoP on Technical Matters.
- The Group shall be constituted by the Secretary (Posts). The Steering Committee members can also be part of the TAG.

Project Evaluation Committee: -

- It will be chaired by Secretary Posts. Member (Technology), Respective chairman of PMC, ASFA, One representative from the field (CPMG/PMG) as members and DDG Technology as Convener.
- Scrutinize all deliverables and shall authorize the payment/release of funds to IPPB.

Project Management Committee: -

- The functional division head will chair the respective committee with concerned IFA, other functional heads of tracks, PMG/DPS from Field, and GM (CEPT) as members. Director (Tech)/ADG (Tech) will be Member Convenor.
- Responsible for business requirements, SRS (Software Requirement Specifications), UAT (User Acceptance Test), Training and GOlive management for both DoP and IPPB tracks.
- Prepare EOI (Express of Interest)/RFPs (Request for Proposal)/SLA (Service Legal Agreement)/MSA (Master Service Agreement)
- Complete owner of the track.
- Responsible for O&M (Operation and Management) phase.
- Access and approve the new requirement and changes required in consultation with the technology division.



8000661414



/basicpay



@basicpay



/basicpay

CEPT: -

- Assist PMC in preparation of scope of work, EOI/RFPs., Bid evaluation, and Master Service Agreement.
- Monitoring of Deliverables and the SLA (Service Legal Agreement).

S.No	Component	Version	Current Management	Future Management
1.	Data Centre Facility	1.0	DoP	IPPB*
2.	Network Integrator	1.0	DoP	IPPB*
3.	Financial System Integrator	1.0	DoP	IPPB*
4.	Remaining Contracts	1.0	DoP	DoP
5.	Financial tracks Hosting, Security, Server infra & Network	2.0		IPPB
6.	Banking & Insurance Application	2.0		IPPB
7.	Fraud & Risk Application	2.0		IPPB
8.	Tablet/Mobile procurement as a replacement of RICT Devices	2.0		IPPB
9.	Mail Management Application (Postal Logistics and back-office mail management, (Front end channel apps/website, eCommerce, Philately	2.0		DoP
10.	Field IT Infrastructure (other than RICT device replacement), Network connectivity, DoP tracks hosting, Business Continuity plan of DoP	2.0		DoP
11.	Finance, Account, Reporting, Analytics, Application, Inventory, CRM etc. Human Resource and Postal Network Management Application	2.0		DoP

*Contract handed over to IPPB w.e.f 01.04.2022



8000661414



/basicpay

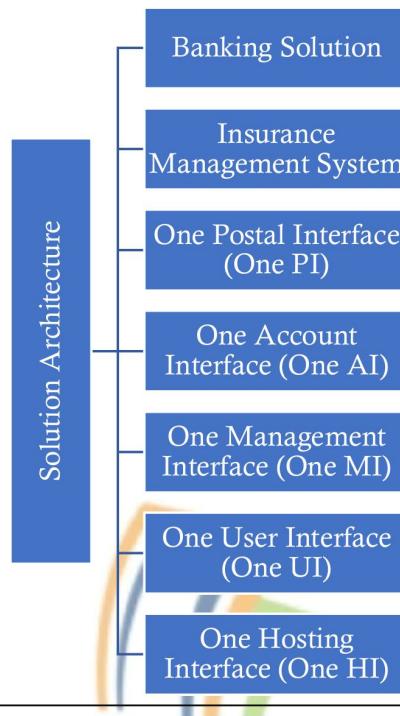


@basicpay



/basicpay

Solution Architecture: -



3. Project Arrow India Post:

- Modernization of India Post Project 2008
- Project Arrow was implemented in 2008 with 900 crores to improve core operations of the Post office with modernized ambiance under the “Look and Feel” Silo of the project.
- ‘Project Arrow’ India Post, is an initiative to transform the Department of Posts into a vibrant and responsive organization and to make a visible and positive difference to quality and efficiency of service to the customer.
- DoP received “Prime Minister’s award for Excellence in Public Administration” during 2008-09 for Project Arrow for transforming India Post on 21-04-2010.
- Department of Posts got its new logo in 09/2008.

4. DAR PAN

- The full form of DAR PAN is – “Digital Advancement of Rural Post Office for A New India”
- The DAR PAN Project is a part of the larger IT modernization project being undertaken in the year 2017 by the Department of Posts with a project outlay of Rs. 1400 Crore to provide a low power technology solution (Information and Communications Technology Device) to each Branch Postmaster (BPM) which will enable each of approximately 1.29 Lakhs Branch Post



8000661414



/basicpay



@basicpay



/basicpay

Offices (BOs) to improve the level of services being offered to rural customers across all the states.

- RICT (Rural Information and Communications Technology) has been renamed as DARPAN.
- IT Modernization Project-The main goal of Project DARPAN
- The primary business goal of the DARPAN project is to improve the quality of service, add value to services and achieve “financial inclusion” of the un-banked rural population while taking advantage of this opportunity to increase revenue traffic.

➤ **Vision of the DARPAN Project India Post**

- 1) To increase the rural reach of the Department of Posts and enable Rural Branch Post offices to increase the traffic of all financial remittances, savings accounts, Rural Postal Life Insurance, and Cash Certificates;
- 2) Improve mail operations processes by allowing for automated booking and delivery of accountable article; increase revenue using retail post business;
- 3) Provide third party applications a platform for rural reach;
- 4) Make disbursements for social security schemes such as MGNREGS etc.

➤ **Project DARPAN - Usage in BOs**

The project DARPAN shall increase the rural reach of the Department of Posts and enable Branch Offices (rural Post Offices) BOs to increase the traffic of all financial remittances, savings accounts, Rural Postal Life Insurance, and Cash Certificates; improve mail operations processes by allowing for automated booking and delivery of accountable article; increase revenue using retail post business; provide third party applications; and make disbursements for social security schemes such as MGNREGS.

As of 31.12.2021, 1,29,380 Branch Post Offices (Rural Post Offices) have been migrated under the “DARPAN” project with the aim of financial inclusion of the rural population of the country.

➤ **DARPAN 2.0 (Unified DARPAN Android APP)**

- **Login** – Through
 - Aadhaar OTP
 - Biometrics of User
 - User ID, Password and OTP
- **Modules in DARPAN 2.0**
 - Utilities
 - Day Begin
 - Special Remittance
 - Generate BODA
 - BODA Reports
 - IPPB
 - Day End



8000661414



/basicpay



@basicpay



/basicpay

- Mail Operations
- Booking Module
- Delivery Module
- Bagging Module
- DAR PAN-CBS
- DAR PAN-Insurance
- Other Devices – Bio Metric Device and Thermal Printer

5. Nanyatha

- “Nanyatha” is an electronic monitoring software in Android GPS-based mobile phone for letter clearance from letterboxes in India Post by the Mail Peon/Postman entrusted with the job.

➤ **Nanyatha MIS**

- When the barcode is scanned using a GPS-based smartphone, data about the location of the Letter Box, Date & Time of clearance, No of letters cleared, Employee Id of the person cleared details will be uploaded to the central server having the web address <https://appost.in/nanyatha>. This is called Nanyatha MIS.
- Public members can go to this website and type the location of the LB in the text box provided. Immediate information about the date and time of clearance will be displayed.
- For the postal administration, each division has been given a log-in (user id and password) to enter into the website and see MIS details which comprise the name of the PO and LB clearance under its jurisdiction.

Web-based MIS to be provided with various access levels as CO/RO/DO/PO.

- 1) List of LBs with last date and time of opening against the due date and time
 - 2) No of letters posted in each LB
 - 3) List of LBs not cleared for many days
 - 4) List of LBs with less no of traffic
 - 5) Google Map based LB identification and clearance MIS to public
- 1) To ensure that the LB attendant has opened the exact letterbox the GPS coordinates of the LB are being captured automatically from the device. The coordinates passed from the device and the coordinates of the master data are tallied for accepting the LB clearance.
 - 2) The Barcode stickers are affixed inside the LB doors to ensure that the scanning happens only when the letterbox is opened.
 - 3) The master data can also prescribe the due time of opening of LB to monitor the time deviation of LB clearance from the prescribed time.

6. Symantec Antivirus

DoP has implemented a Symantec Antivirus solution to secure the IT Assets of the Department such as Desktops and Laptops.

1. Symantec Endpoint Protection is a client-server solution that protects Laptops, Desktops, and servers in our network against Malware.

2. Symantec Endpoint Protection combines virus protection with advanced threat protection to proactively secure our computers against known threats.

➤ **Group Update Provider (GUP)**

DoP has implemented Symantec Group Update Provider in each office with more than 10 systems.

1. GUP is a system, installed with Symantec AV, which downloads AV updates from a central server and distributes updates locally to other systems in the same subnet.

2. GUP server is the most critical system for Symantec Antivirus update.

3. End user to keep the GUP system up and running all the time. Tag the GUP system with Label for easily Identifying.

4. End-user to ensure that GUP is updated with the latest AV signature.

5. System Administrator / Head of the office to ensure that GUP server is powered on 24x7 and connected to Sify network.

6 . System will first check for the latest signature in the configured GUP server, then DC Server, if both the server connectivity is not working it will try to get the signature from Symantec Cloud. The systems which are not configured with GUP Server will directly connect to DC Server for Live update then Symantec cloud.

7. Active Directory (AD)

The Windows Active Directory provides central authentication and authorization services for Windows-based computers. It also enables Network Administrators to assign policies, deploy software, and apply critical updates to an organization.

DoP has implemented the Microsoft Active Directory Solution. All the desktops/laptops and servers should be on Active Directory. Similarly, all the employees /users must have their own user id.

Active Directory provides a list of authenticated users and computers in an organization. Using Active Directory, we can efficiently manage users, computers, groups, applications in a centralized location.

8. Email Solution

1. Email IDs (Name-Based) will be created for all employees of DoP under Group ‘A’ & Group ‘B’ (Gazetted) and Inspector Posts category. Employee ID is mandatory for creation.



8000661414



/basicpay



@basicpay



/basicpay

2. Functional Email Ids (Designation Based) shall be created for all the standard designations available in the department up to the regional level. All divisions and other DoP offices will have one email for each office.
3. Mobile Number of the custodian is to be mentioned for communicating the email password.
4. NIC platform (<https://mail.gov.in>) is used for accessing email.
5. 10 GB storage is available for storing emails.
6. OTP is mandatory for email login.

Abbreviations on IT Modernisation of Department of Posts

Acronym	Technology Terms Description used in Postal Department	Category
CIS	Core Insurance Solutions	CIS
CM	Change Management	CM
MBE	Mail Booking Engine	CSI
CSI	Core Systems Integrator	CSI
DPMS	Delivery Postman Management System	CSI
IPVS	India Post Visibility System	CSI
LSM	Letter Sorting Machine	CSI
LSS	Labour Scheduling System	CSI
MCLASS	Mail & Logistics Appointment Scheduling System	CSI
PIS	Personal Information System	CSI
SPS	Sort Program System	CSI
SSO	Single Sign-On	CSI
TMS	Transport Management System	CSI
DRC	Data Recovery Centre	DRC
ATM	Automated Teller Machine	FSI
CBS	Core Banking Solutions	FSI
ECMS	Enterprise Content Management System	FSI
EMV Chip	Euro Master Card Visa	FSI
FSI	Financial System Integrator (Financial Services System Integrator)	FSI
MoH	Mail Operations Hardware	MoH
DCF	Data Centre Facility	NI
DNS	Domain Name system	NI
GUI	Graphical User Interface	NI
LAN IP	Local Area Network Internet Protocol	NI
MAC binding	Media Access Control	NI
MPLS	Multi-Protocol Label Switching	NI
NI	Network Integration	NI
NIOP	Network Integration Operations Plan	NI



Basic Pay Publications
(An ISO 9001:2015 & MSME Certified)
<https://www.basicpay.in>
email – info@basicpay.in

NOC	Network Operations Centre	NI
NOFN	National Optical Fibre Network (NOFN):	NI
NSP	Network Service Provider	NI
SIC card	Smart Interface Card	NI
SNAC	Symantec Network Access Control	NI
TNF	Technically Not Feasible	NI
VPNOBB	Virtual Private Network over Broad Band	NI
WAN	Wide Area Network	NI
RH	Rural Hardware	RH
DARPAN	Digital Advancement of a Rural Post office for A New India	RSI
RICT	Rural Information Communication Technology (Rural ICT)	RSI
RSI	Rural System Integrator	RSI
AMPC	Automated Mail Processing Centre	Tech term
COD	Cash on Delivery	Tech term
eMO	electronic Money Order	Tech term
MNOP	Mail Network Optimization Project	Tech term
MPCM	Multi-Purpose Counter Machine	Tech term
PBI	Post Bank of India	Tech term
WUMT	International Western Union Money Transfer	Tech term
BIU	Business Intelligence Unit	Tech term
CCEA	Cabinet Committee on Economic Affairs (CCEA)	Tech term
CEPT	Centre for Excellence in Postal Technology	Tech term
DBT	Direct Benefit Transfer	Tech term
DPR	Detailed Project Report	Tech term
DSCI	Data Security Council of India	Tech term
EoI	Expression of Interest	Tech term
FTP	File Transfer Protocol	Tech term
GIS	Geographical Information System	Tech term
GL	General Ledger	Tech term
GPS	Global Positioning System	Tech term
GUP	Group update Provider	Tech term
IMO	International Money Order	Tech term
IMTS	International Money Transfer Service	Tech term
IPPB	India Post Payments Bank	Tech term
IVR	Interactive Voice Response (IVR)	Tech term
KPI	Key Performance Indicator	Tech term
LSA	Licensed Service Area (LSA)	Tech term
MMTS	Mobile Money Transfer Service	Tech term
MoU	Memorandum of Understanding	Tech term
MTTR	Meantime to resolve	Tech term
NACH	National Automated Clearing House	Tech term



Basic Pay Publications
(An ISO 9001:2015 & MSME Certified)
<https://www.basicpay.in>
email – info@basicpay.in

NEFT	National Electronic Fund Transfer	Tech term
NPCI	National Payment Corporation of India	Tech term
OEM	Original Equipment Manufacturer	Tech term
OTP	One Time Password	Tech term
PIC	Project Implementation Committee	Tech term
PMA	Postman Mobile Application	Tech term
PMU	Project Management Unit	Tech term
PRS	Passenger Reservation System	Tech term
RCA	Route Cause Analysis	Tech term
RFP	Request for Proposal	Tech term
RTGS	Real-Time Gross Settlement	Tech term
SAP	Systems Applications & Products	Tech term
SLA	Service Level Agreement	Tech term
SMS	Short Messaging Service (SMS)	Tech term
SRS	Software Requirement Specifications	Tech term
STQC	Standardization Testing and Quality Certification	Tech term
UAT	User Acceptance Testing	Tech term
UIDAI	Unique Identity Development Authority of India	Tech term
NIC	National Informatics Centre	Tech term
NOC	Network Operating Centre	
UPS	Uninterrupted Power Supply	
AMS	Agency Management System	
NISG	National Institute for Smart Government	
SI	System Integrator	
SLR	Service Level Requirement	
POS	Point of Sale Systems	
SAN	Storage Network	
WFMS	Workflow Management System	
USP	Universal Service Provider	
HRMS	Human Resources Management System	
LMS	Lead Management System	
SDP	SDP: Service Delivery Platform	
NOFN	National Optical Fibre Network	
OFC	Optical Fibre Cable	
CIC	Circle Implementation Committee	
RIC	Regional Implementation Committee	
TPIC	Technical Projects Implementation Committee	
CIM	Customer Interaction Management	
EMS	Enterprise Management System	
NMS	Network Management System	
ESB	Enterprise Service Bus	
FRS	Functional Requirement Specification	



8000661414



/basicpay



@basicpay



/basicpay



RFD	Results Framework Document.
PCC	Project Coordination Committee
ARC	Architecture Review Committee
EFMS	Electronic Fund Management System
CPSMS	Central Plan Scheme Monitoring System.
IP	Internet Protocol.
IVRS	Integrated Voice Response System
SPARROW	Smart Performance Appraisal Report Recording Online Window

