

*An Overview of
Nippon Data's capability in
Distribution Utility Sector*

Nippon Data Confidential

March, 2009



Client Without NDS

ISSUES AT Client Site

- No Documentation Work.
- No tracking in IT Activities.
- Not Following the SDLC Process
- Submissive Approach because of dependence on One Vendor only.
- Inefficient inventory management.



IMPACT

Leads to

- Poor services
- Quality degraded not meeting the appropriate standard.
- Projects were not completed on their stipulated time.



Solution



**Nippon Data Systems
(NDS)**

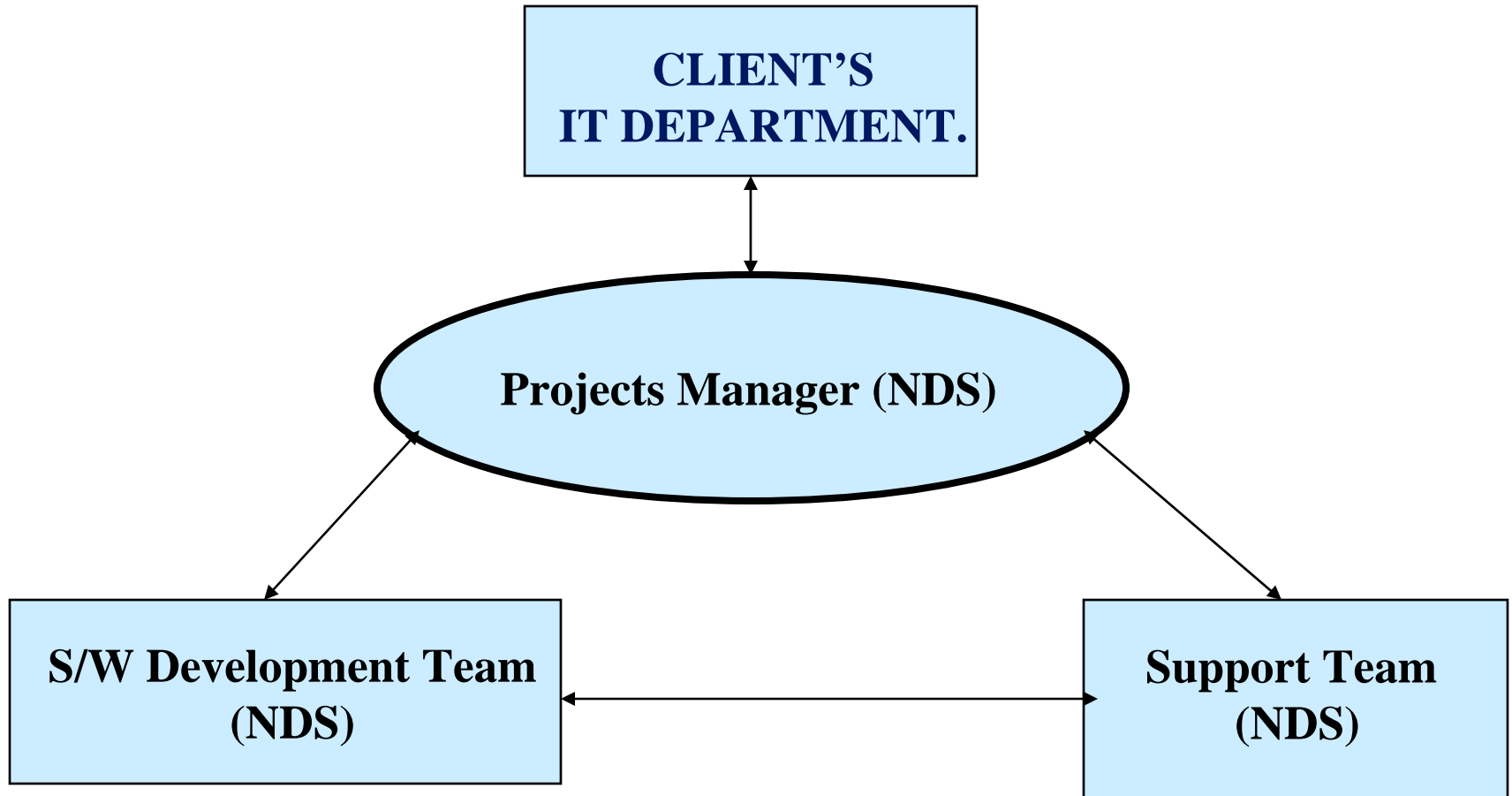
Why NDS ?

- Excellent Success – Track record.
- Supported by a big pool of experienced IT consultants.
- NDS, is formed with an objective to provide software development and consulting services.
- NDS has well developed methodologies for systems design and development followed by leading international companies like UNISYS and IBM. This has been possible through international experience of NDS consultants.
- We work as part of our clients organization to ensure, we understand client business better and deliver quality systems.
- Better relationship and co-ordination with Client.
- Experience & expertise, exceeding 10 years.

Why NDS ?

- Leading Partner in India of IT Majors ensuring the timely technology upgradation.
- Large IT infrastructure.
- Run your enterprise in accordance with strategy and plans and achieve corporate objectives by aligning workforce and organizational objectives. NDS is your partner in achieving the same.
- NDS is your partner in technology by giving you access to latest technologies with the best ROI.
- Will help in achieving a seamless integration of processes spread across the multiple geographical locations.

The Project Team

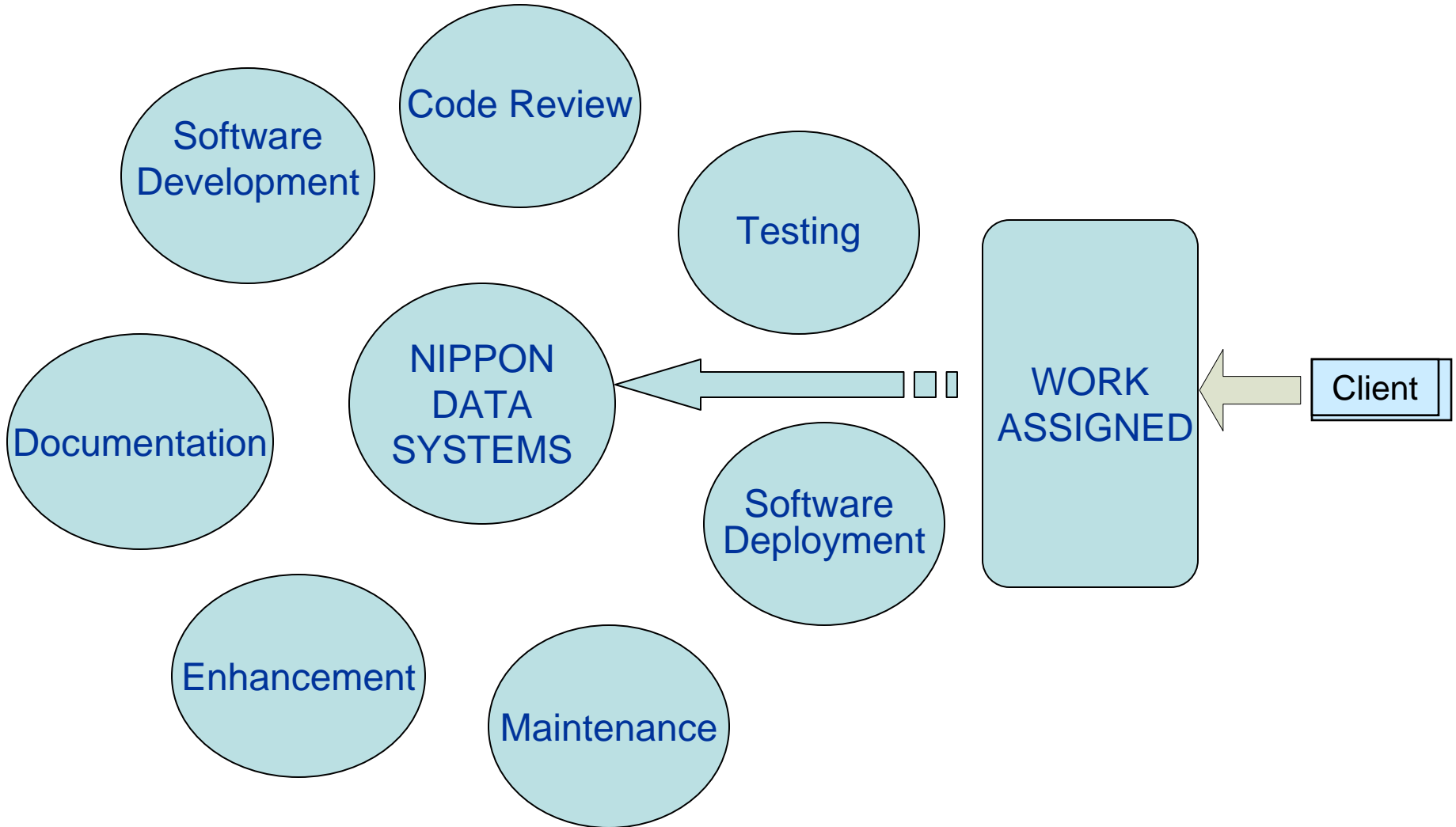


Software Services

We offer the following software solutions to Utility Clients covering a wide range of technologies. Our services include-

- Off the shelf Applications
- Software Development
- Business Process Re-Engineering
- Workflow Management Solutions
- Application Maintenance
- Internet, Intranet and e-Business Solutions
- Software Migration Across Different Platforms
- Manpower Resource Augmentation
- CRM and Call Center Management

S/W Life Cycle



Following are the list of Application modules NDS has experience on :-

- System Implementation & Monitoring Process (SIMP)
- Project Repository Module (PRM)
- Inventory Management System (IMS)
- File & Bill Tracking System (FTS)
- Energy Audit System (EAS)
- Electricity Billing System (EBS)
- User Management Module (UMM)
- High Value Consumer Survey (HVCS)
- Agency Collection Module (ACM)

Contd...

- Web Billing System
- Power Supply Module (PSM)
- Bill Amendment Module (BAM)
- Payment Collection Module (PCM)
- Revenue Cycle Module (RCM)
- Legal Information System (LIS)
- Central Processing Cell (CPC)
- Automatic Meter Reading (AMR)
- Surveillance
- Enforcement

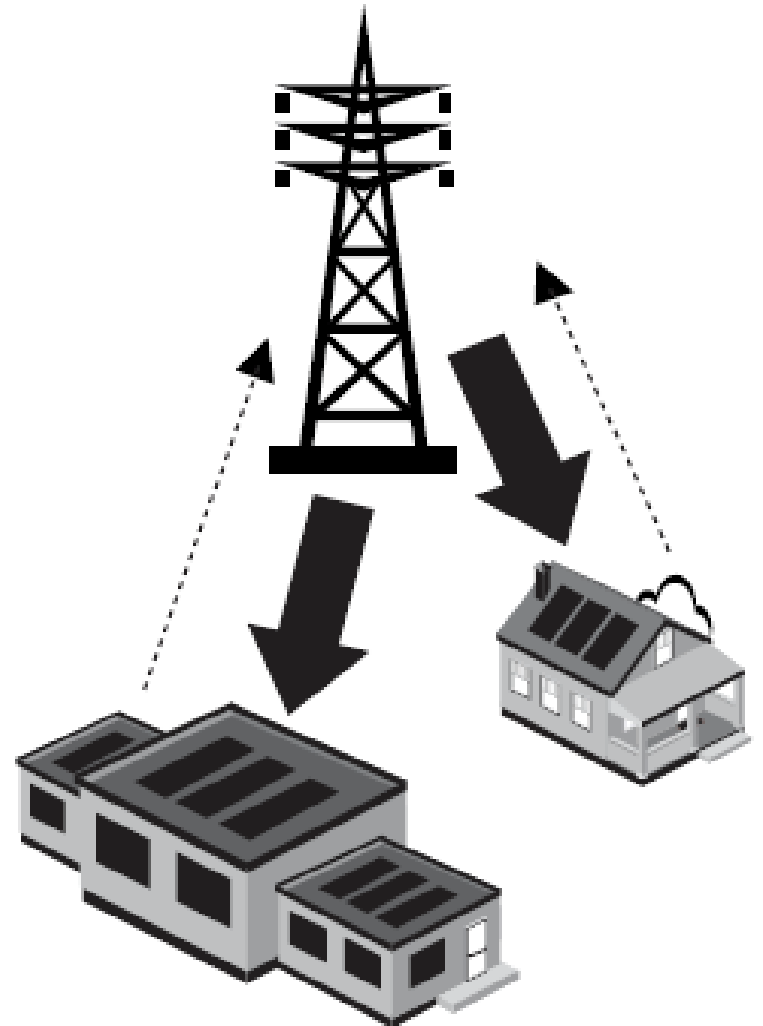
Contd...

- Recovery Module.
- Online MIS Reports.
- Contract Management System.
- Refund Management System.
- Automatic Frequency Shedding/Restore System
- Consumer Complaint Module (CCM)
- Process Tracking System (PTS)
- IT Dashboard
- Prepaid Meter System.

Power Supply Module

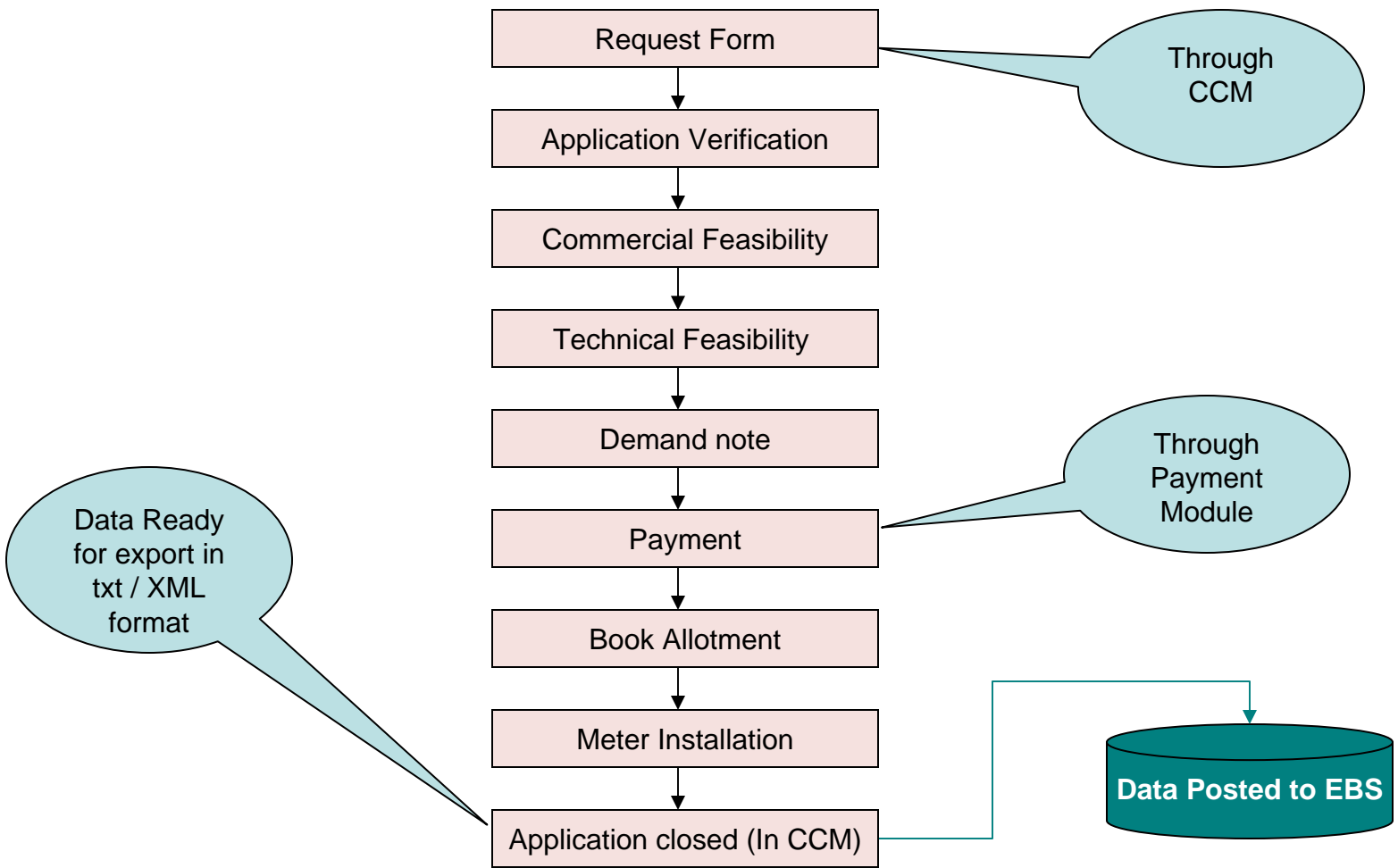
Features:

- New Connection
- Name Change
- Address Change
- Load Change
- Category Change
- Meter Change
- Reconnection
- Disconnection



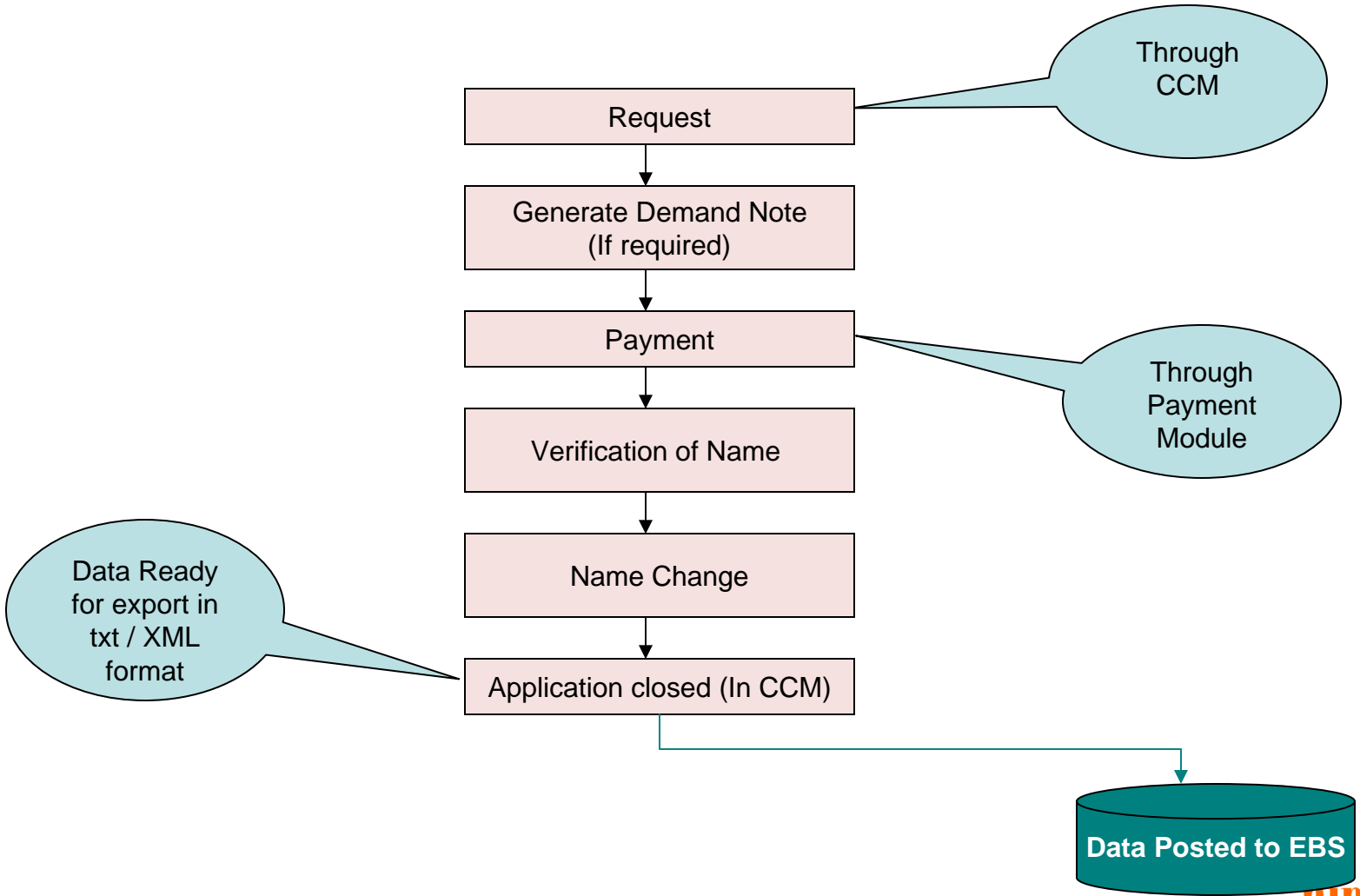
P S M : New Connection

Process Flow



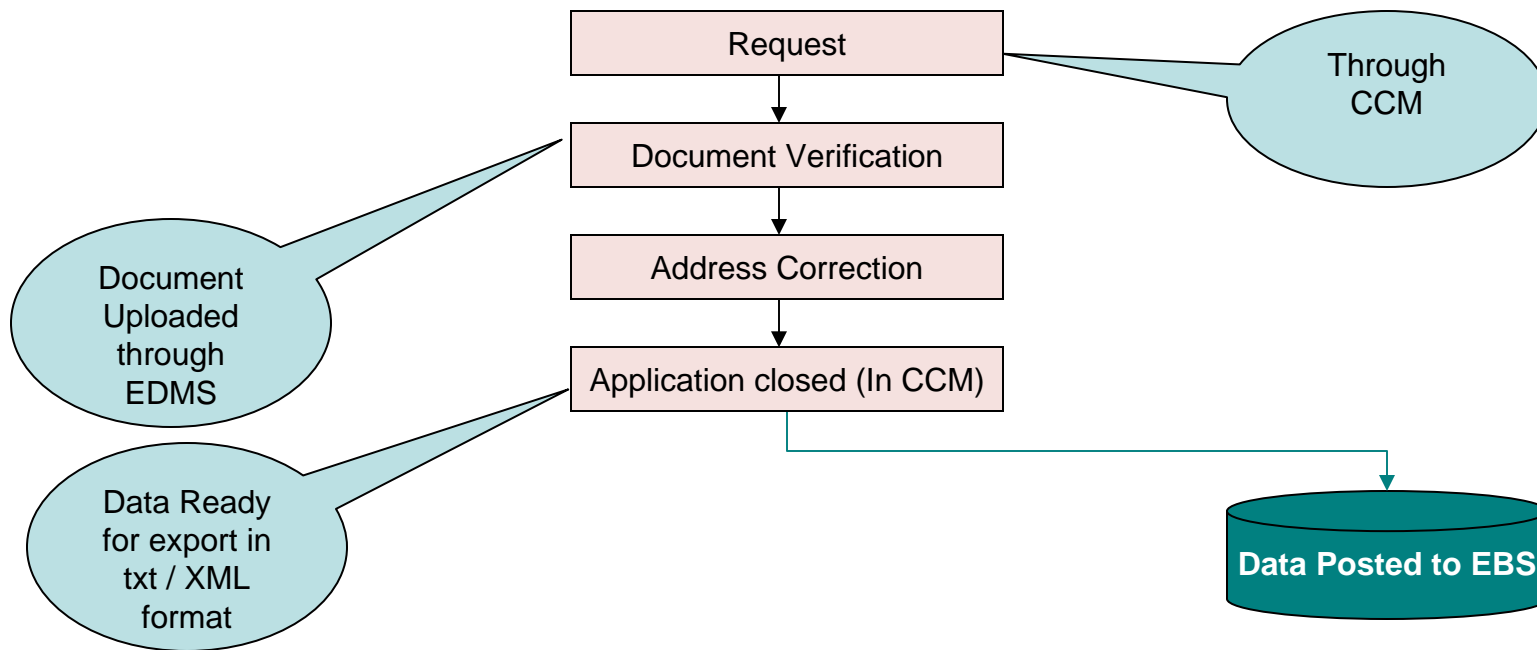
P S M : Name Change

Process Flow



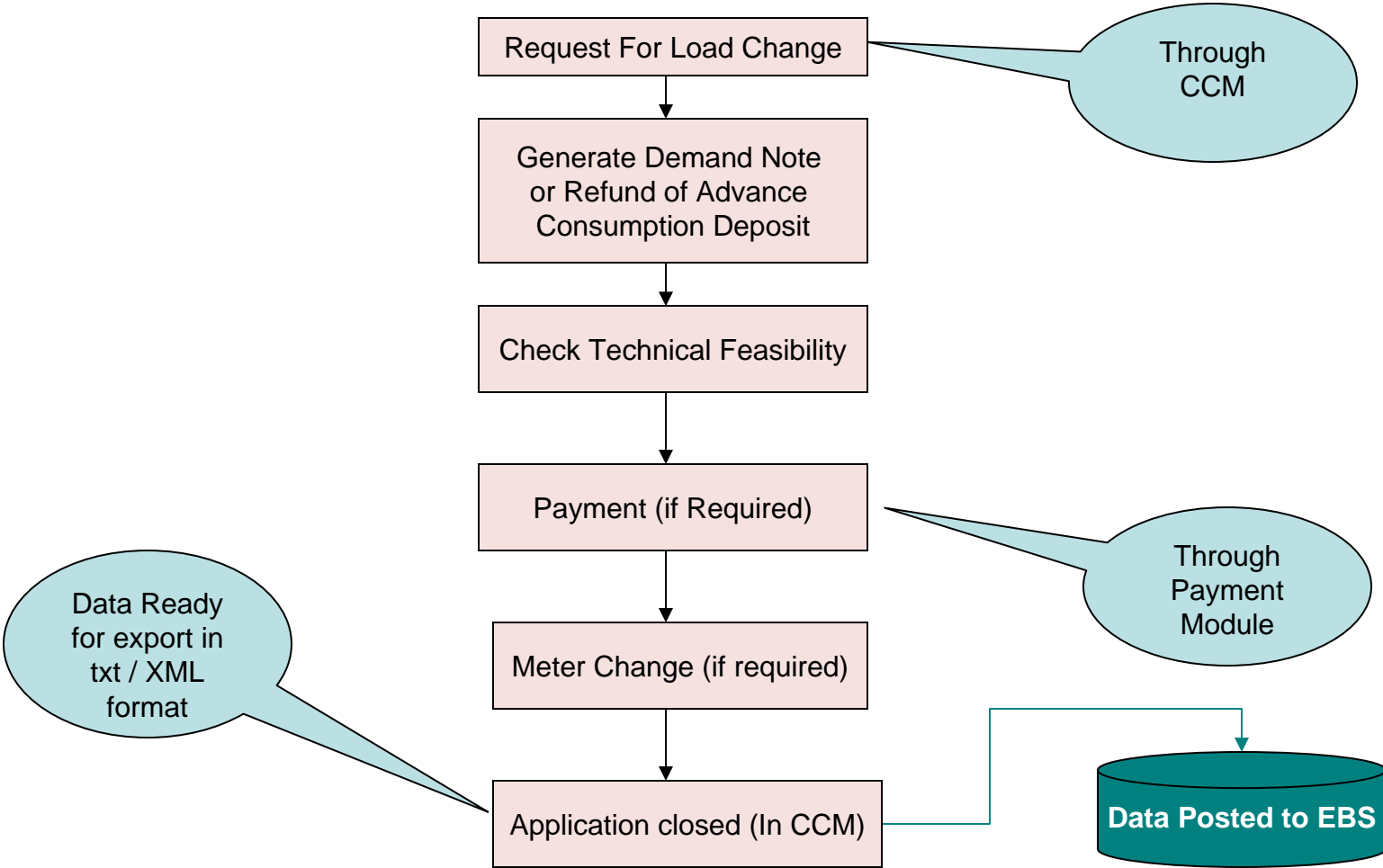
P S M : Address Change

Process Flow



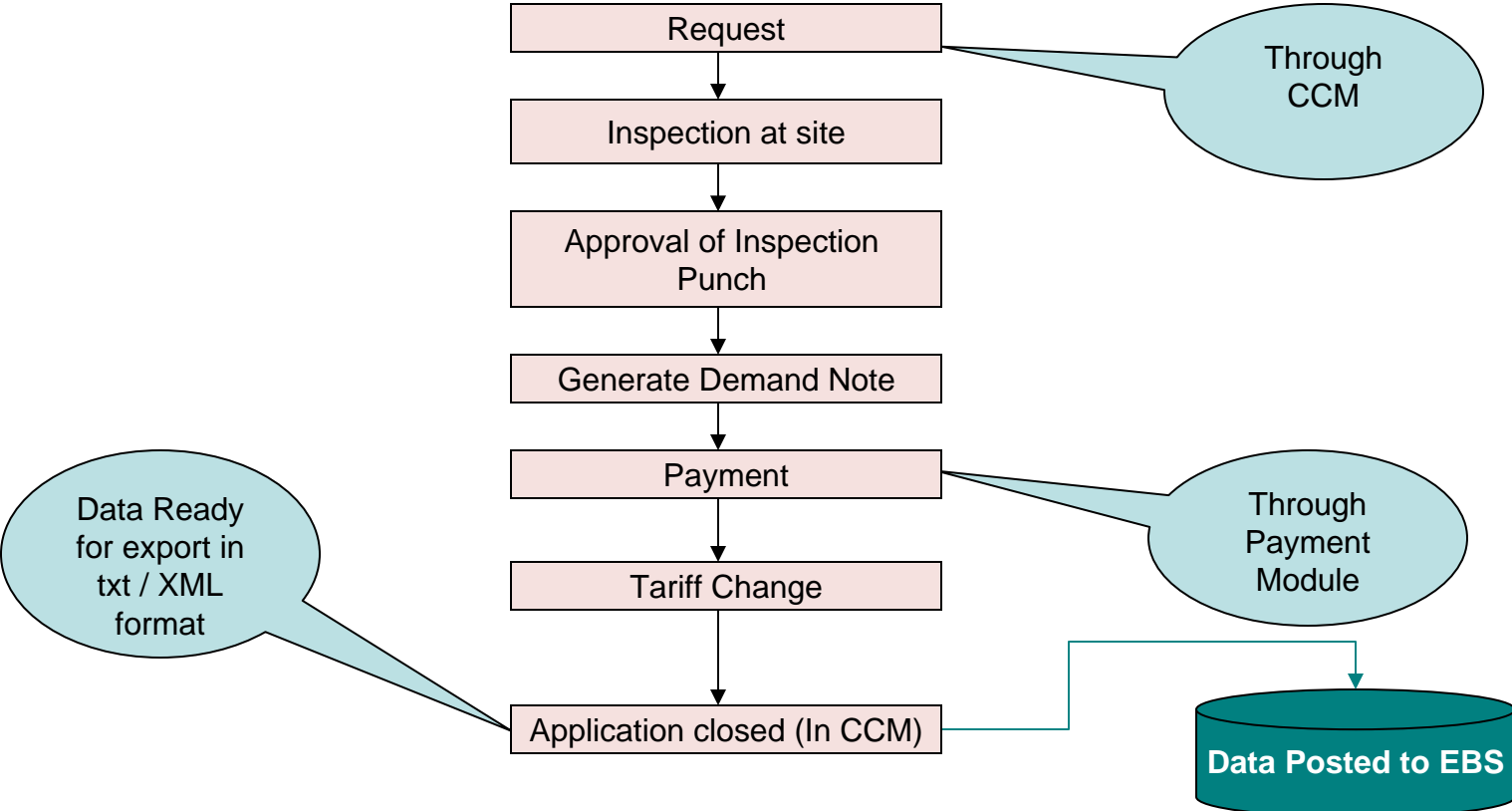
P S M : Load Change

Process Flow



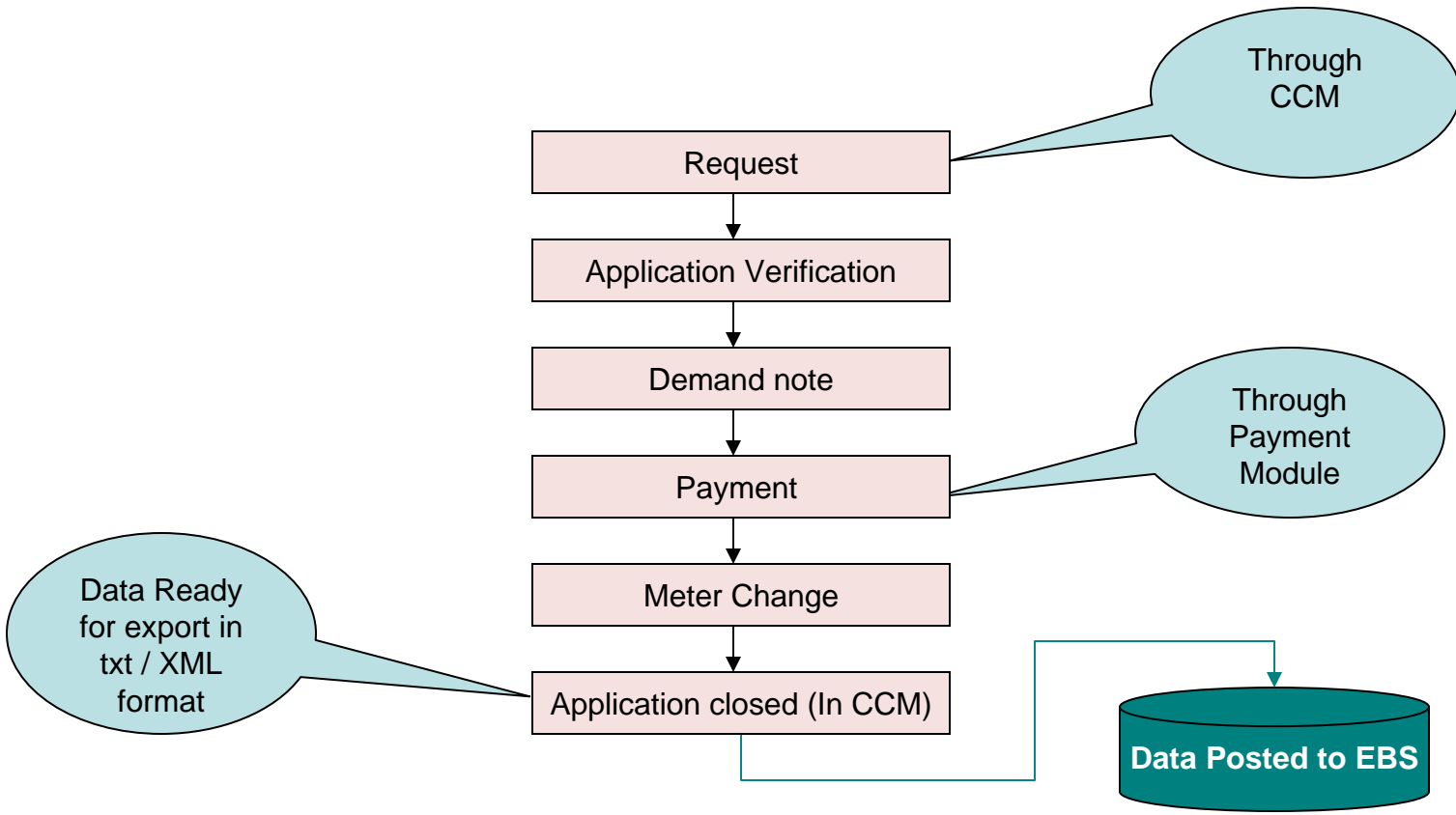
P S M : Category Change

Process Flow



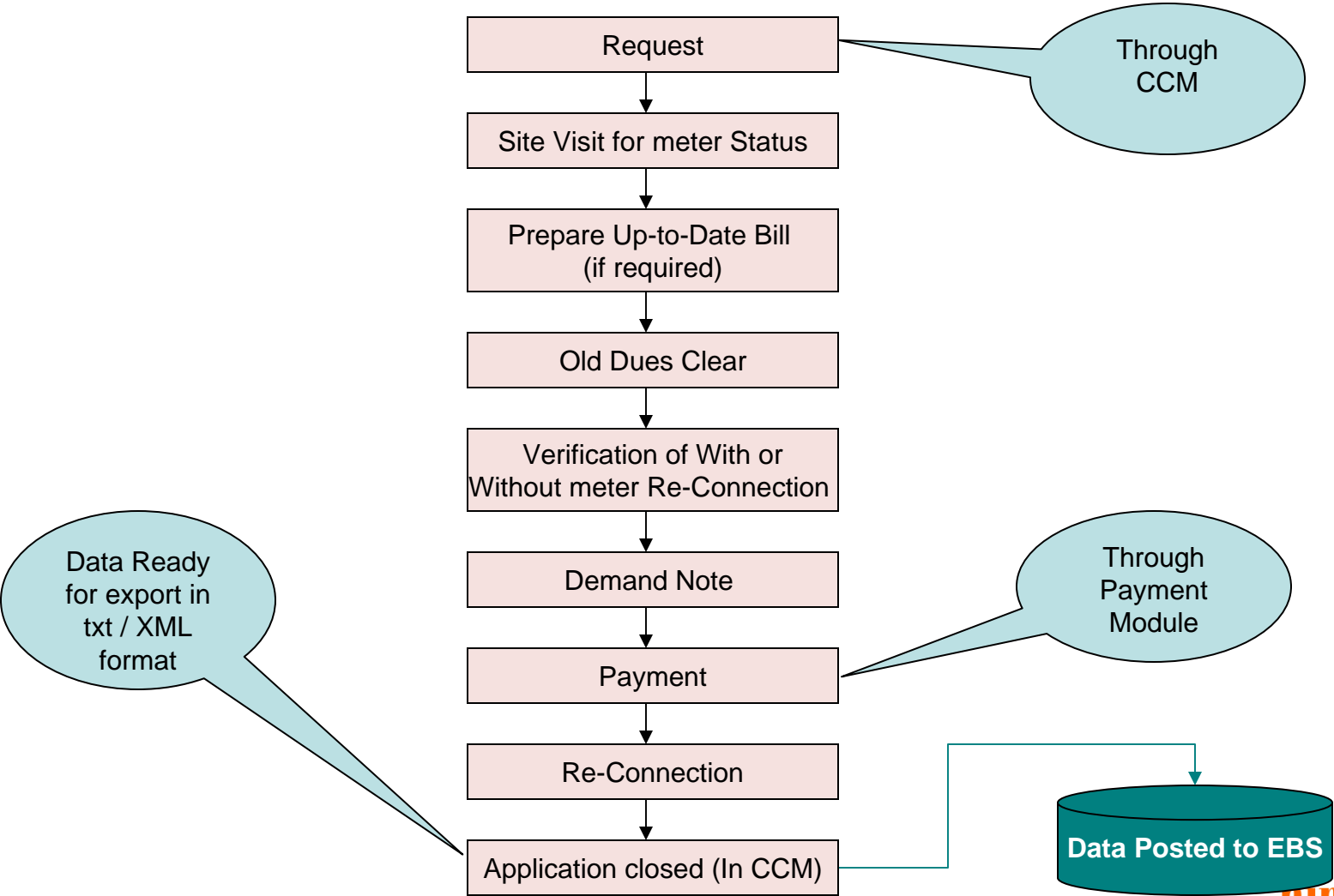
P S M : Meter Change

Process Flow



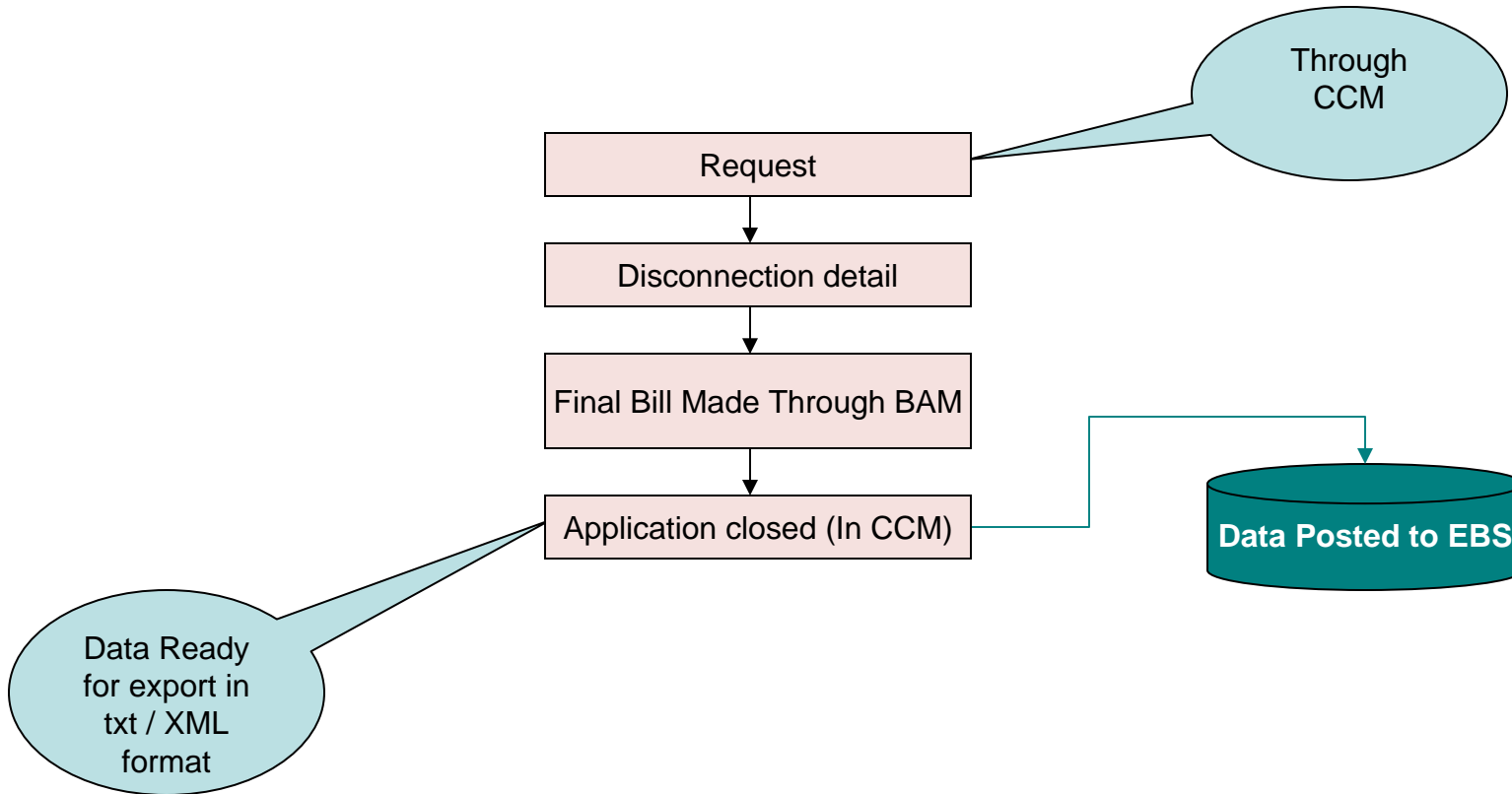
P S M : Reconnection

Process Flow



P S M : Disconnection

Process Flow



Bill Amendment Module

Features:

- Application through CCM
(Bill Revision, Due Date Extension, Part Payment)
 - Bill Printing (XML Based Template) Duplicate & Amended
(Customisation relevant to DISCOM)
 - Due Date Extension
 - Part Payment
 - Journal Entry For Unit Based Revision
 - Journal Entry For Non Unit Based Revision
 - Journal Verification
- ### Data Export Interface for:
- Due Date Extension.
 - Journal Entry

The image shows a utility bill and a payment slip. The bill is titled "Your Electricity Bill" and includes customer details, a summary table, and contact information. A red box highlights a "Red EL* light" warning. The payment slip is titled "Payment slip" and includes a barcode and a QR code.

Your Electricity Bill

Name: **Shri Pournam Singh** CEN No: **2950091947** Your bill amount payable
Address: **100/101, Sector 14, Phase 1, Gurgaon, Haryana 122001** New No. New 2020 4222 0027 **Rs. 2,350.00**
Cycle No: **09/19** Old No. Old 2019 4222 0027 **Due Date: 10/19/2020***
City: **West** R.S. No: **100/101, Sector 14, Phase 1, Gurgaon, Haryana 122001** Bill No: **2950091947** **all months: New 09**

Units consumed	Current month charges (Rs.)	Amount (Rs.)
748	2,345.67	7.81

CONTACT DETAILS

www.bpsdelhi.com
Billing Queries: 39-99-99-97
Regional customer care & payment center:
DISC, Sector 14, Phase 1, Gurgaon, Haryana 122001
Customer Manager: Mr. C. R. Singh
Commercial Officer: Mr. S. Singh

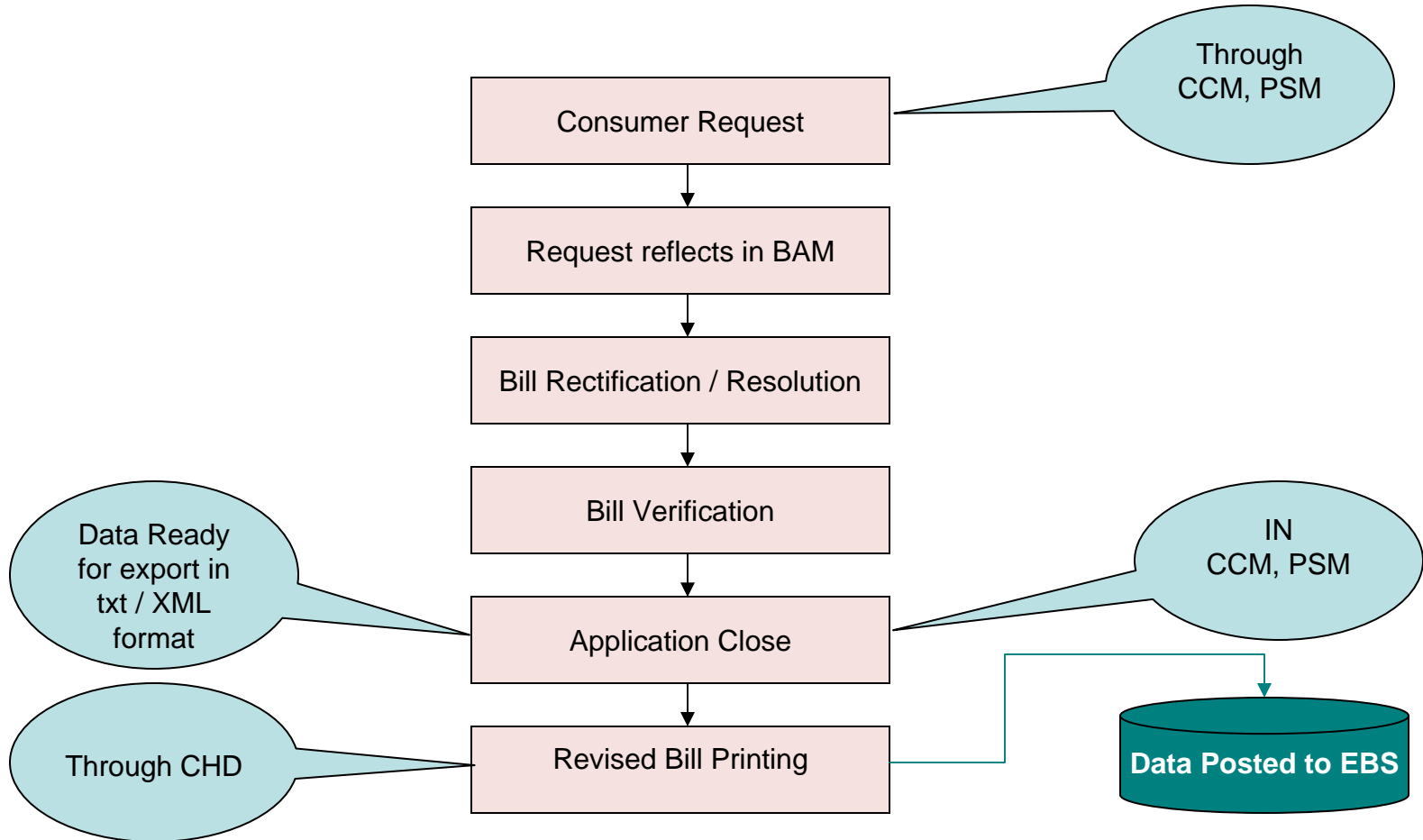
RED means faulty internal wiring, means you need to look overleaf.

Payment slip

Customer No: **2950091947** New No. New 2020 4222 0027
Old No. Old 2019 4222 0027
Bill amount payable: **Rs. 2,350.00**
Due Date: **10/19/2020**
Barcode and QR code are also present.

Bill Amendment Module

Process Flow



Consumer Complaint Management

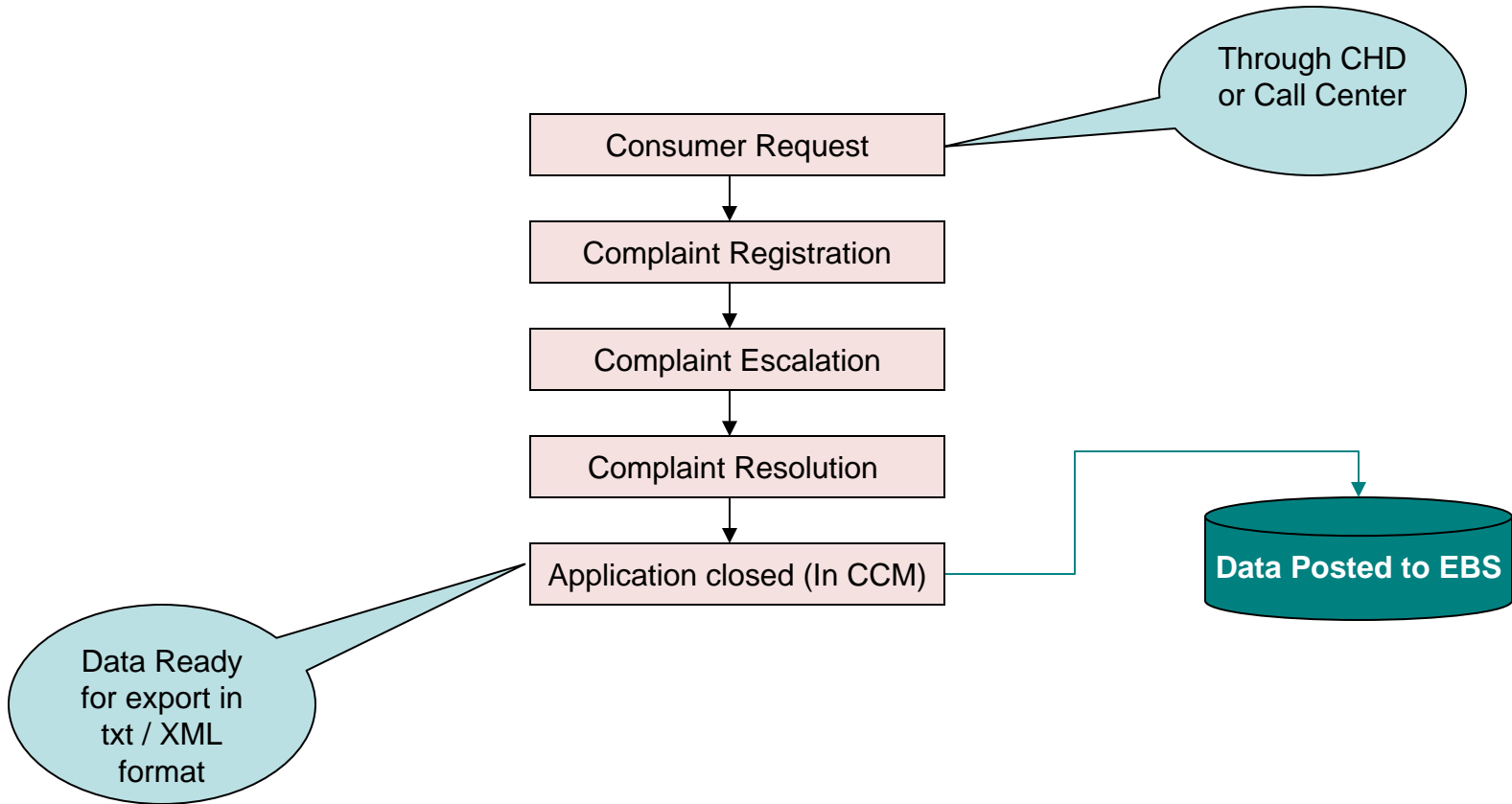
Features:

- Request Registration
- Escalation according to Company norms & Regulatory Level
- Complaint Resolution
- Complaint Closure



Consumer Complaint Management

Process Flow



Revenue Collection Management

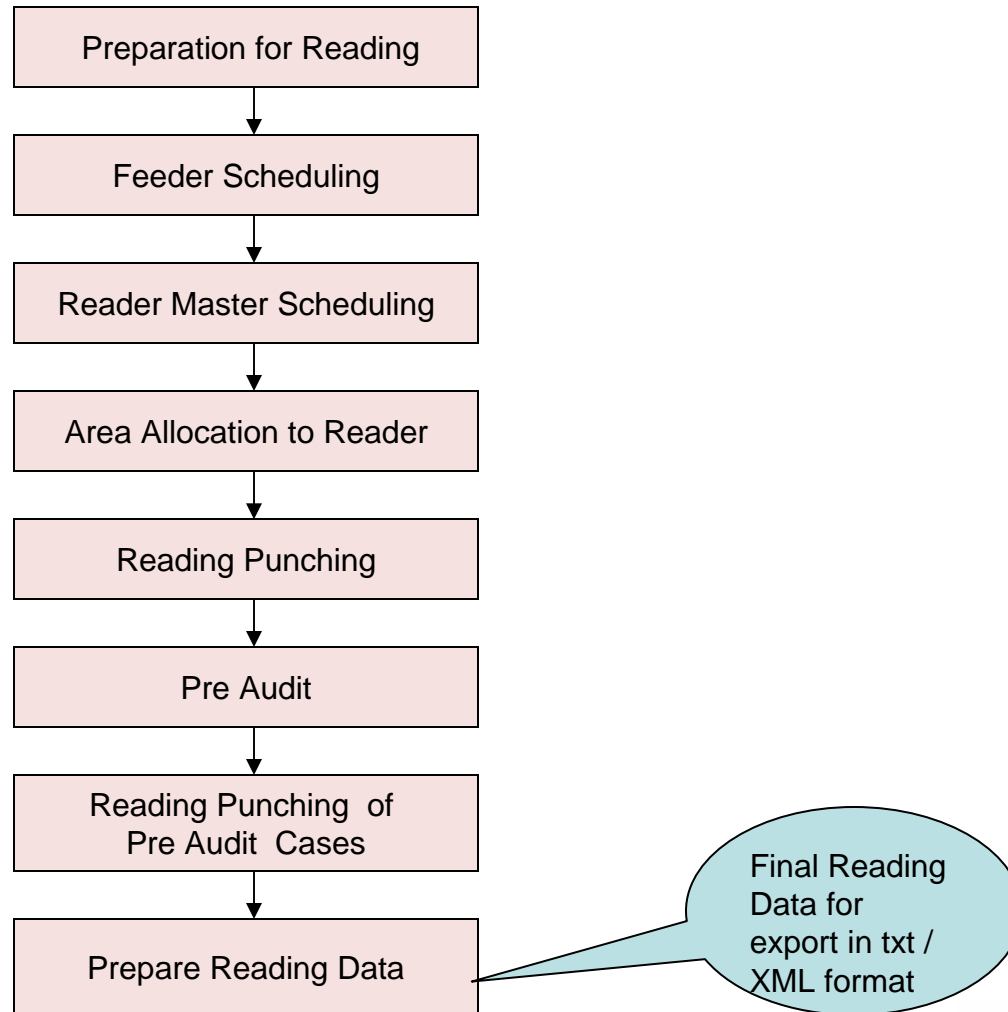
Features:

- Meter Reading
- Pre-Audit
- Billing
- Post-Audit
- Bill Printing & Distribution
- Exception Handling



Revenue Collection Management

Process Flow



Collection: Payment

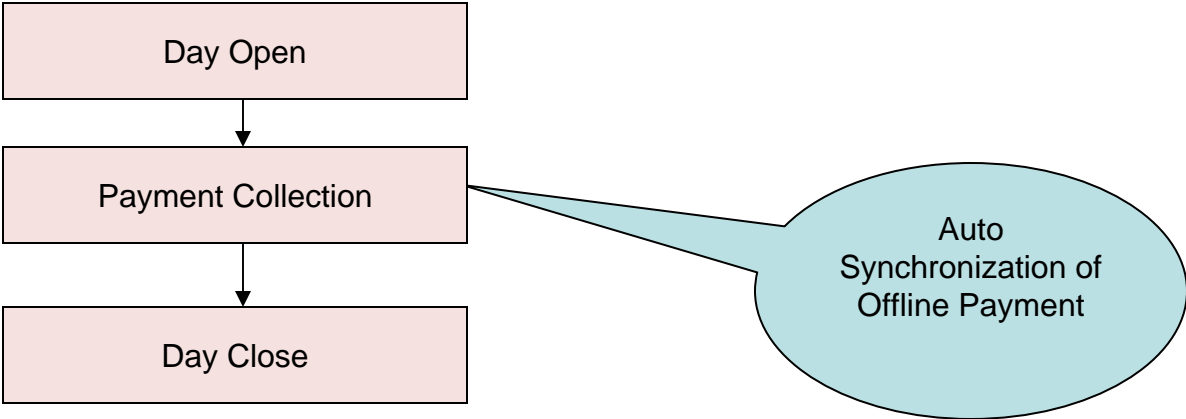
Features:

- Payment collected in both Offline & Online Mode
- Option to collect payment with & without Bar Code Scanning
- Multi Bill / Multi Cheque collection option
- Auto calculation of LPSC amount if due date is crossed
- Auto Synchronization of offline Payment data
- System generated receipt printing on bill
- Payment cancellation / correction
- Option to Export Offline Data
- MIS Reports



Collection: Payment

Process Flow



Collection: Central Processing

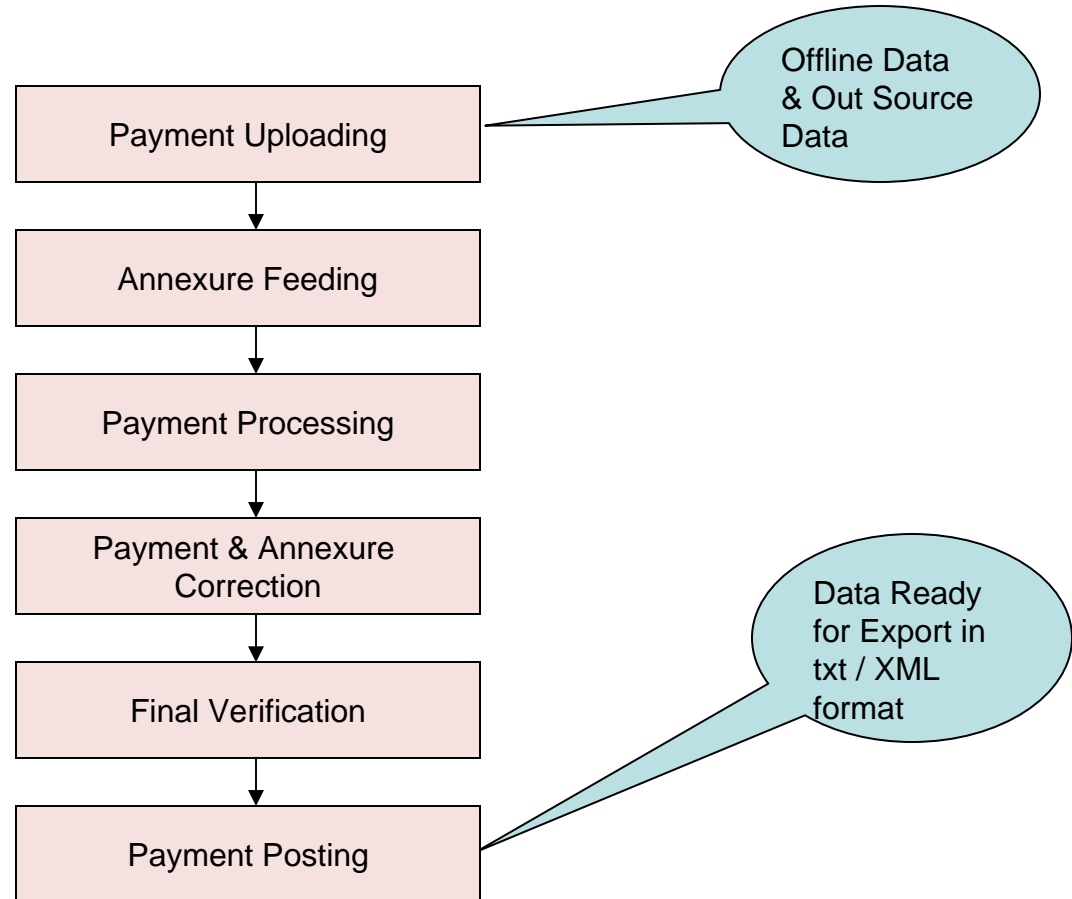
Features:

- Cashier Rights Assigning
- Counter Master Creation with option to Bind Counters to IP / MAC Address
- Offline Data Upload
- Option to accept payment through outsource agencies like bill desk, easy bill, credit cards etc
- Cheque dishonor punching and notice printing
- Graphical representation of Counter payment tracking
- Cashier efficiency tracking mechanism
- Payment Verification / Correction / Cancellation
- Payment Posting
- MIS Reports



Collection: Central Processing

Process Flow

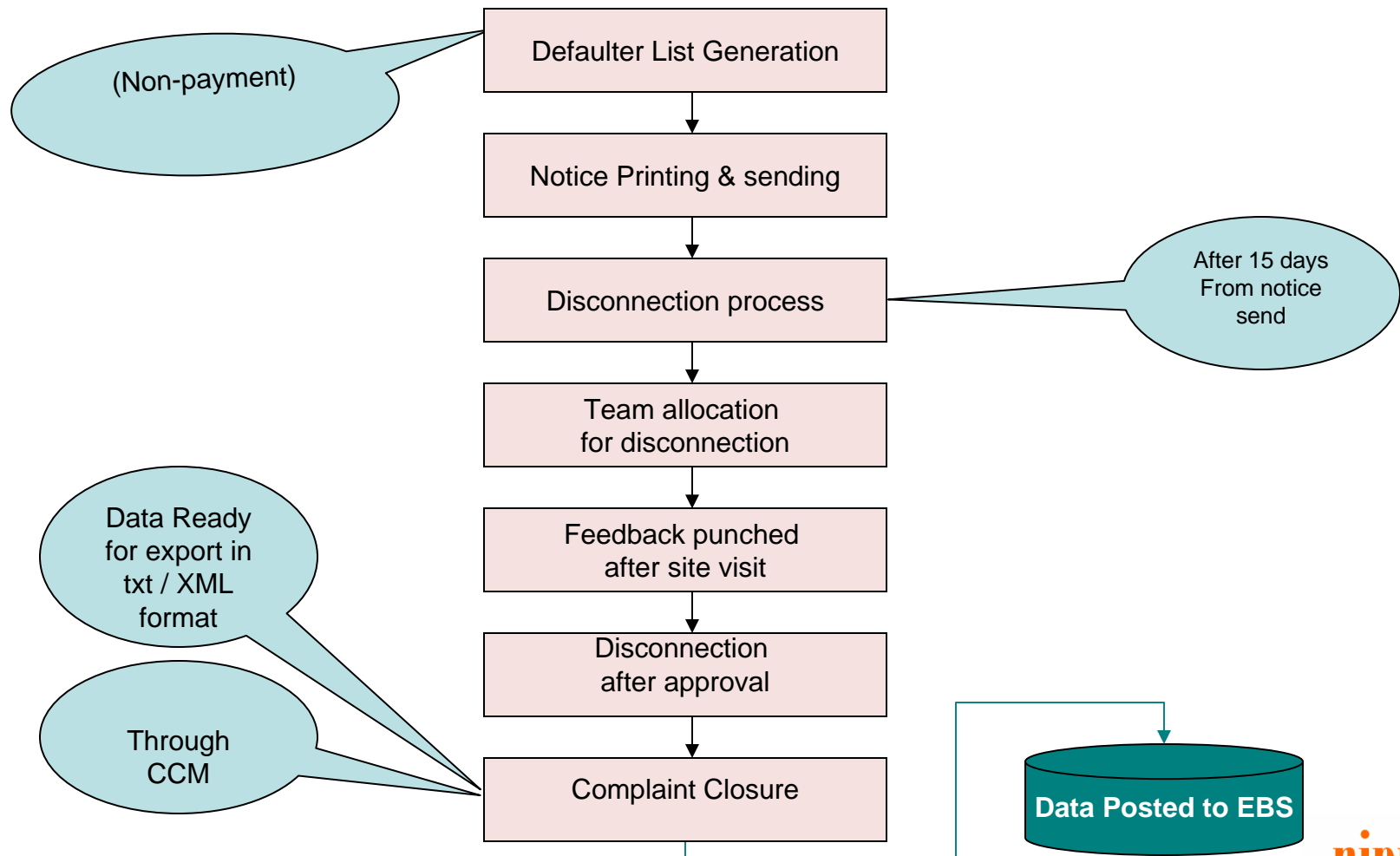


Features:

- Defaulter list Generation
- Notice Printing & Dispatch
- Disconnection Process
- **The outstanding amount would be divided in the required slabs, for e.g:**
 - Slab 1: Greater than 100,001
 - Slab 2: 10,001 – 100,000
 - Slab 3: 5,001 – 10,000
 - Slab 4: 10 – 5,000
- **Depending on the last payment date, the customers would be segmented as:**
 - Very Recent: Payment made in the last 3 months
 - Recent: Payment made in the last 6 months – 3 months
 - Old: Payment made in last 12 months – 6 months
 - Very Old: No payment in the last 12 months

Recovery

Process Flow

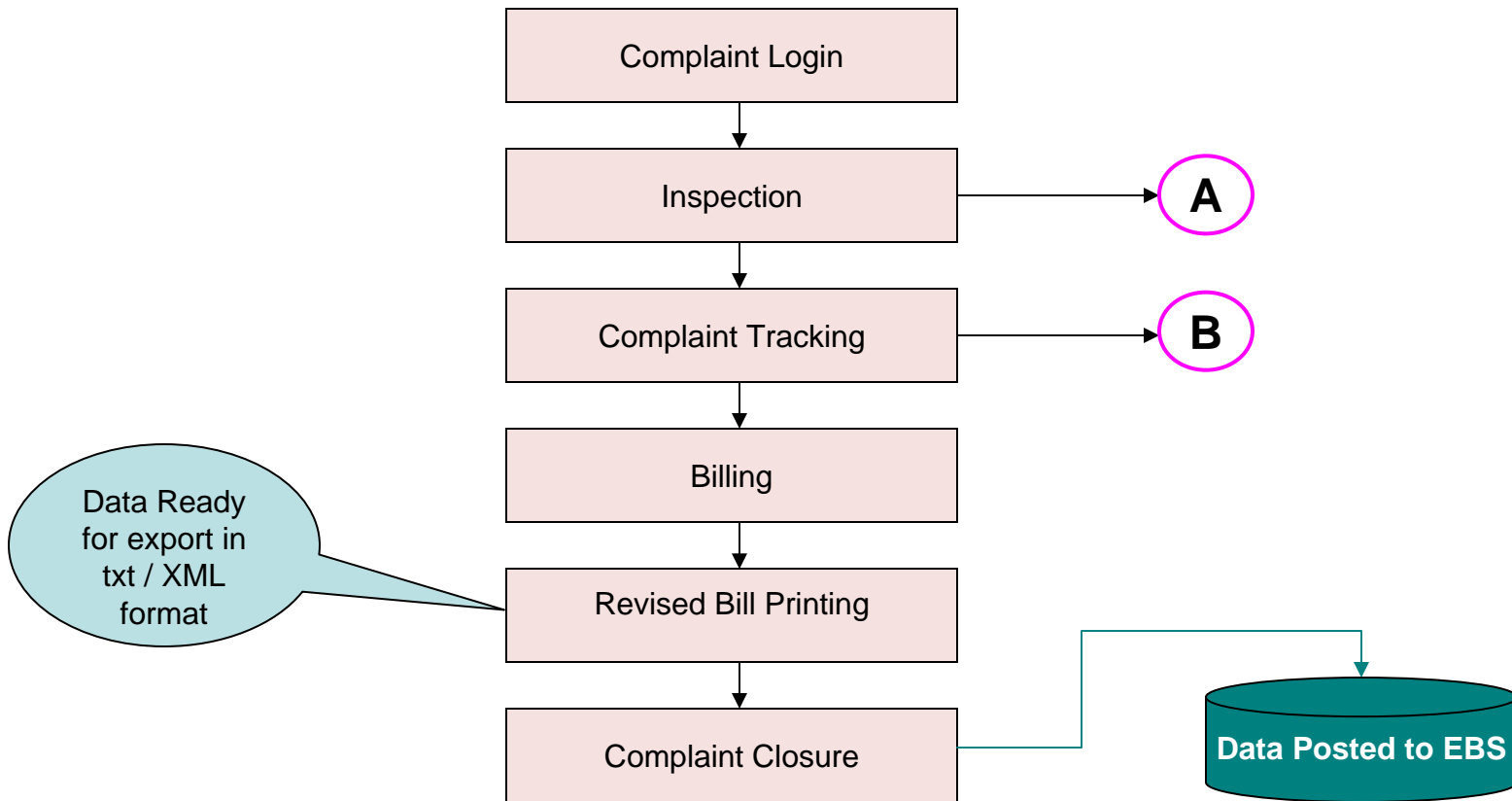


Features:

- Data Extraction of suspected Cases
- Field Allocation
- Investigation Report Punching
- Case Establishment & Decision of Meter Tampering/ DT
- In Case of Meter Tampering
 - Hearing Notice
 - Speaking Order
- Load Punching
- Bill Generation (Configurable according to Company norms)

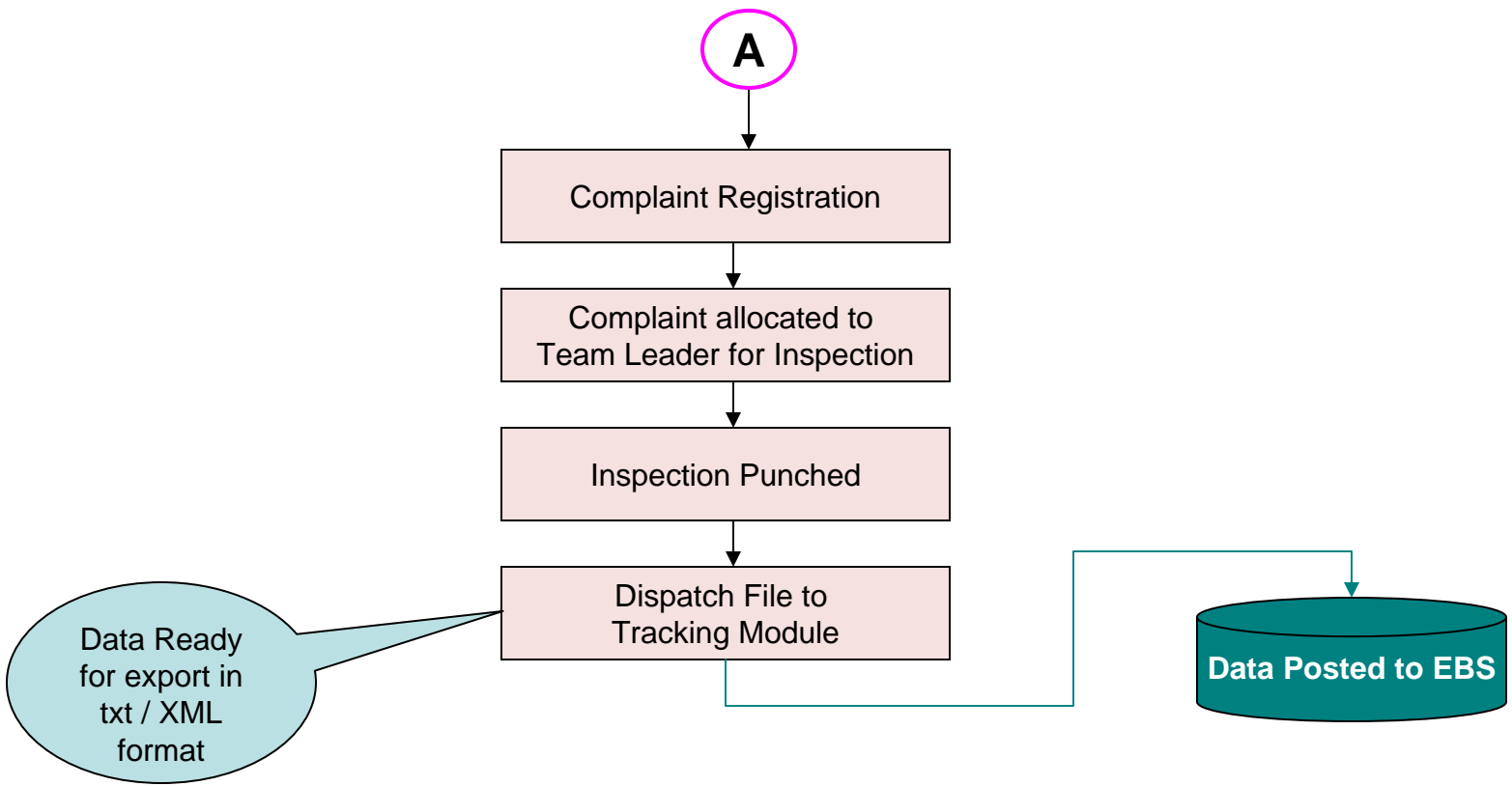
Enforcement: Inspection, Tracking, Billing

Process Flow



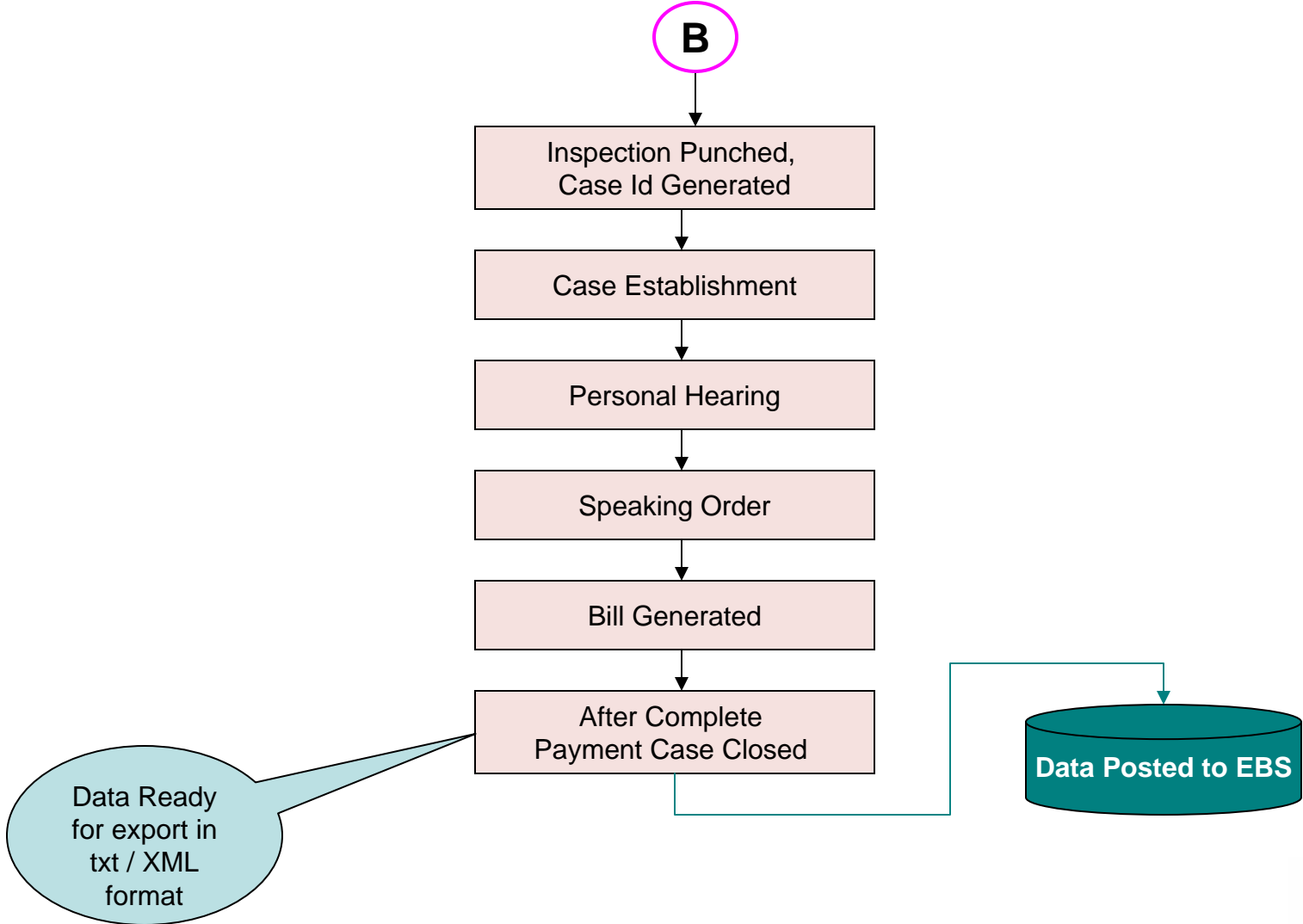
Enforcement: Inspection

Process Flow



Enforcement: Tracking

Process Flow

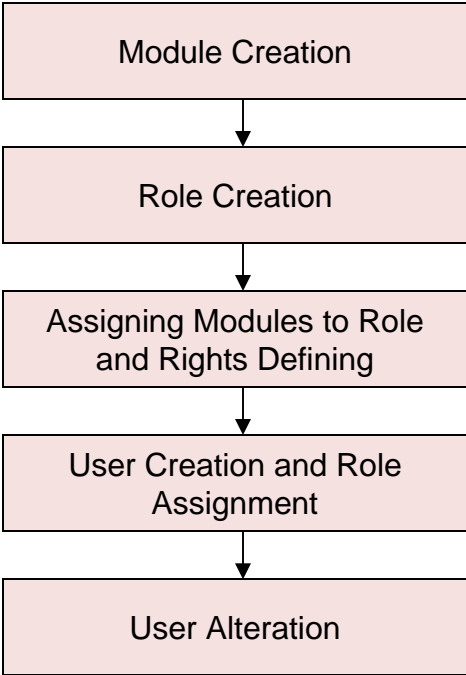


Admin Console

Features:

- Role Creation & Modification
- Module Creation
- Linking roles to Modules for add, view, modify, delete rights
- Zone Creation & Modification
- User Creation / Modification & Blocking
- Assigning multi roles to users
- Assigning Temporary Rights and Auto Revocation
- Miscellaneous Admin Activities
- Complete Audit trail of all activities
- Two separate passwords for view and transactions
- Automatic user id blocking after predefined number of consecutive unsuccessful attempts.
- Configurable Login, Log Out time for users
- Automatic user id blocking if it is not used for a predefined days

Process Flow



Features:

- Designed to support the Central Engineering Services Department
- Process for online approval of all types of distribution schemes.
- Process includes online movement of schemes at different stages of approval.
- Keeps transparency in the system & thus tracking of schemes become easier.
- Complete monitoring of the schemes from initial creation to execution stage can be done through this software.

PROJECT REPOSITORY MODULE

Features:-

- Designed to provide a seamless integration of the entire IT department to handle module wise activities.
- Integrates the entire IT department into a single unit to provide information related to any module.
- Functions as an interface between IT head, Module head and other team members.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.

INVENTORY MANAGEMENT SYSTEM

Features:-

- Designed for Software Inventory Management i.e. management of stock in an efficient and effective way.
- Tools for inventory management are Hardware, Networking and Telephone.
- Its main purpose is to maintain accountability and provide more transparency in the system.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.

FILE AND BILL TRACKING SYSTEM

Features:-

- Designed to support departments like EHV, Civil, Commercial, O&M etc.
- Bill/file moves between different divisions and this module is used to track the status. one can make out where the delay has been made and where the work is pending.
- Keeps transparency in the system & thus tracking of files or bills become easier.
- Various MIS reports are available to see the status of pending or closed bills; company wise, division wise, vendor wise or bill value wise.

Features:-

- Main objective is to handle various calculation logics used to find transmission and distribution details.
- Transmission and Distribution loss is calculated at Feeder Cluster level and DT level.
- Various calculation logics are grouped as:
 - Feeder Cluster
 - Customer Tagging
 - Energy Input
 - Energy Sale
 - Alignment of Input Energy and Sale Period.

ELECTRICITY BILLING SYSTEM

Features:-

- It is an efficient Power Billing System.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- It is specially designed to:
 - ❖ Meet consumers requirements for efficient electricity billing control and management.
 - ❖ Full integration with other supporting modules used by other departments like PSM, CCM, MMG, BAM etc.

Features:-

- It is an administrator Module of EBS, EAS and PTS.
- Main objective is to create New Users and Groups.
- Its purpose is to give group privileges having Machine Window information and Program Master information.
- This is basically divided in 5 Sub Modules:
 - User Management
 - Group Management
 - Networking
 - Program Management
 - Report

HIGH VALUE CONSUMER SURVEY

Features:-

- It is a window based application which is developed in D2k.
- This software displays consumer survey related information and reports.
- HVCS covers Modem Installation and Meter Details and their Status of Faulty.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- User can have summarized data in the form of different Reports.

AGENCY COLLECTION MODULE

Features:-

- This module is placed under Consumer Application System (CAS).
- It processes those defaulters whose payment is not been received till 31st March 2006.
- Facility to allocate defaulters to agencies
- .It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- This system has facility to add new agency and facility to generate reports like How many agencies are working now?

Features:-

- Designed to benefit the consumers of the client.
- Bill requisition by consumer, he/she provides the e-mail id and the bill is sent automatically to the id as soon as it gets generated.
- Consumer gets the overview of his monthly bill anywhere, anytime through the internet.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.

Features:-

- This is the web application which displays different report related to user who directly communicate with CEO's.
- Its main objective to maintain all the complaints in the database which comes directly to CEO.
- It is used to display three type of reports:
 - Circle wise
 - Division wise
 - User wise

POWER SUPPLY MODULE

Features:-

- Controls the operation and maintenance of proper power supply.
- Main objective is to deal with the consumer connection related issues.
- It as an interface to handle the consumer related requests and complaints like New Connection, Load Enhancement, Disconnection, Reconnection, Name change, Address Change etc.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- It is a web-based application that will run on Remote PC's through LAN, only authorized user will be allowed to work on this application.

Features:-

- Placed under CAS (Consumer Application System).
- It keeps all the information of cases which are filed either by Company or by consumer.
- It is an interface to track the updated information of cases.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- It keeps the records of case type, dispute information, result of case, court's information, judge information and advocate information.

AUTOMATIC METER READING

Features:-

- Introduces online computerized data monitoring and logging system for all the Grid stations under the Client.
- This System can Monitor Grid Stations automatically and keep all the information into database which can be accessed anytime.
- Energy flow for all grid locations can be monitored at a central location.
- Line diagram of every Grid Station will show current status of Grid.

Features:-

- This system allow the users to verify the data i.e. Cash details and Cheque details entered by the cashier at the PCM end.
- The main features of CPC Module are Verification and validations of the entries made by the Cashier at the PCM end.
- Perform necessary Corrections and updating the data to remove the errors found while verification.
- Generation of Reports and Receipts for the overall summaries related to transaction, status of the counters etc.

Features:-

- Placed under CAS (Consumer Application System).
- Used to keep all type of information of defaulters.
- Main objective is to generate a defaulter list based on some specific criteria
- Criteria includes regular consumer status, bill should not be hold in post audit, and net outstanding amount must be greater than Rs. 10 etc.

PROCESS TRACKING SYSTEM

Features:-

- It is developed on an idea to eliminate manual intervention/ dependency in various RCM and Billing Process related with Scheduling, Execution, Administration and Resource Planning.
- It keeps information of every step of the billing cycle.
- It enables better monitoring of the Cycle Stage and plan accordingly for Cycle Scheduling, Execution, Administration and Resource Planning.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.

Automatic Frequency Shedding System

Features:-

- It is developed on an idea to eliminate manual intervention and to automate the shedding and restoring the power supply in the circles of Client.
- This software is integrating with one API means integration of software with machine.
- It is a web-based application that will run on Remote PC's through LAN, only authorized user will be allowed to work on this application.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- FBLS module will streamline the system and further improve the efficiency of work

Contract Management System

Features:-

- This module is for HR department.
- It is used for generation of Employee's Recruitments, Separations , Deployment and Transfers, Attendance.
- This is complete HR module for contractual, part-time employees tracking.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- Computerization of CMS module will streamline the system and further improve the efficiency of work.

Prepaid Meter System

Features:-

- Introduces online prepaid meter system at client site.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.
- This System can Monitor Grid Stations automatically and keep all the information into database.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.

Refund Management System

Features:-

- It is developed on an idea to collect and keep track of the refunds in Various departments of client.
- As well as monitoring and processing the various level functioning in the organization and keeping the records saved for future use.
- User can have summarized data in the form of different Reports.
- It will remove time consuming and cumbersome manual work that has possibility of inaccuracy.



THANK YOU