APPLICATION SERVER
GATEWAY

SWITCHING - GATEWAY
POSTPAID MODULE
Connection and Reconciliation
Technical Specification

Version 1.0.3 (December 2008)

PT. PLN (PERSERO) DISTRIBUSI JAWA BARAT DAN BANTEN

2008

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REVISIONS

VERSION	DATE	DESCRIPTION
1.0.1	May 22nd, 2008	Change recon global flow illustration, log spec
1.0.2	July 28th, 2008	Fix Due Date and Read Date format in messaging spec to DDMMCCYY (previously is CCYYMMDD) including message stream example
1.0.3	December 30th, 2008	Fix 101 to 001 (sign-on action) in page 11 Updated reconciliation description and examples in page 21

SECTION 1
CONNECTION

Background

PLN-DJBB (Perusahaan Listrik Negara – Distribusi Jawa Barat dan Banten) is a government company supplies electricity in Jawa Barat and Banten. As one of public company, one of major purpose is how to increase customer satisfaction by improving its customer service level including easing the customer pay their monthly bills. Currently, there is more than one switching companies accessing PLN-DJBB database directly using different approach. Along with internal requirements comes from internal PLN-DJBB and based on existing operation problems with switching companies, also other service requirements from PLN-DJBB such as Naik Daya Online (NaDa-H) and Pre-paid program, PLN-DJBB proposed a single and centralized data access through a unified gateway using financial standard messaging protocol, ISO8583:2003 (http://www.iso.org).

The simple idea is all registered switching need to access PLN-DJBB database must enter through single unified and standard gateway using standard message and standard mechanism. Further, direct access to database is highly prohibited.

Global Process Flow

Global process flow of bill payment can be illustrated as following:

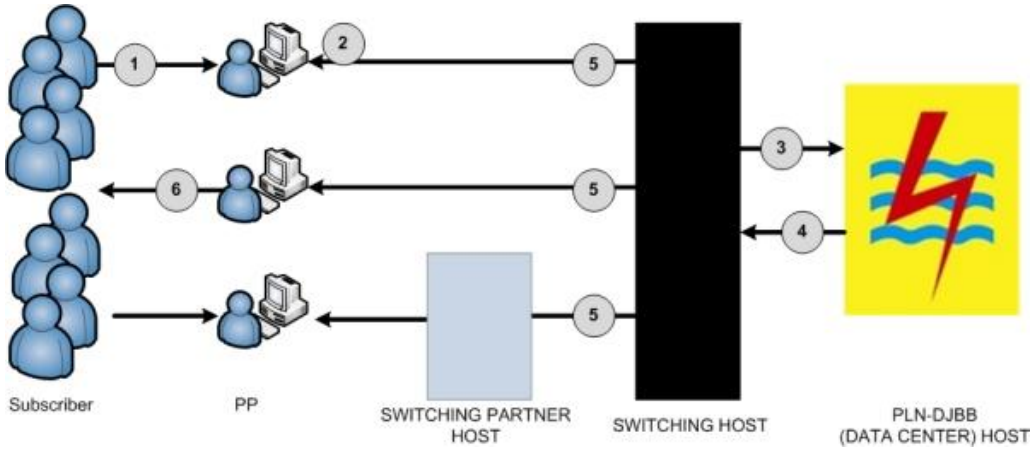

Figure 1. Global Process Flow

1. Customer come to SWITCHING/SWITCHING PARTNER PP to pay their bill
2. After type-in SUBSCRIBER NUMBER (IDPEL), SWITCHING PP will send the request to SWITCHING HOST
3. SWITCHING HOST will create a standard message using PLN-DJBB Standard Message and sent it to PLN-DJBB GATEWAY HOST (later is known as GATEWAY only)
4. PLN-DJBB HOST will do a checking with its internal database and GATEWAY will response with appropriate information to SWITCHING HOST
5. SWITCHING HOST will re-package the message and response to SWITCHING PP
6. SWITCHING PP will receive the information and print the receipt if the payment process was successful

SECTION 2
CONNECTION ARCHITECTURE

Connection Architecture

Please notify carefully the following illustration described how every involved system are interact each others.

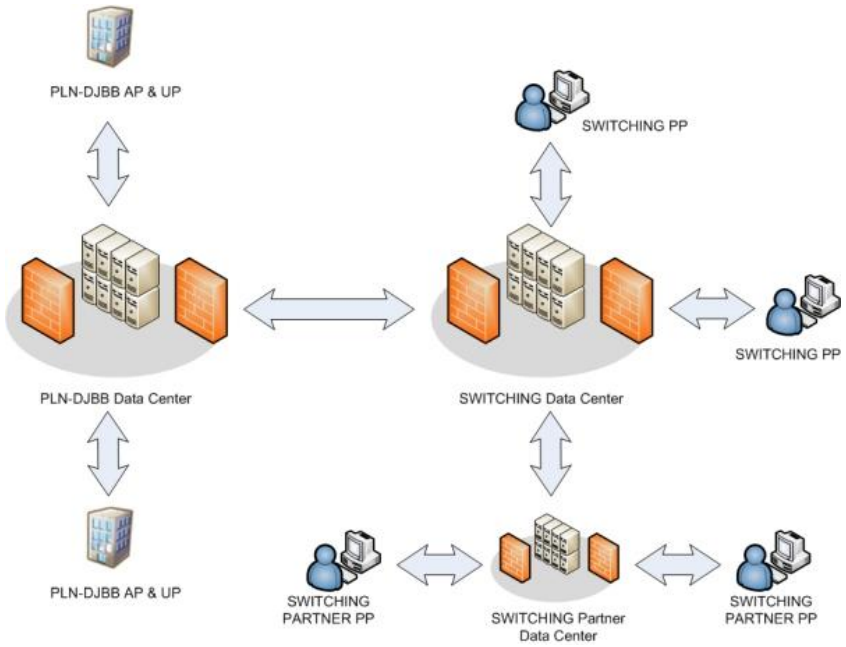

Figure 2. Connection Architecture

SWITCHING System can access PLN-DJBB System using dedicated communication channel, fiber channel for instance for link reliability and availability reasons. Any other connection other than mentioned, must be discussed first with PLN-DJBB.

Messaging System

TCP/IP Communication System will bring the information from SWITCHING System and PLN-DJBB-Application Server Gateway and vice-versa.

The standard communication protocol that used by PLN-DJBB Application Server is TCP/IP ("telnet" like), where client must send a negative byte value -1 (hexa -1x01 in JAVA/C instead of bytes of CRLF characters for real telnet application) to indicate END OF MESSAGE (EOM). Every request message will be responded by an appropriate reply according to each request type.

SECTION 3
MESSAGING PROTOCOL SPECIFICATION

Standard Messaging Protocol

PLN-DJBB message is ISO8583:2003 based message, a well-known and wide-used financial messaging protocol to be exchanged between SWITCHING SYSTEM and PLN-DJBB SYSTEM.

There are four basic message types as following:

- INQUIRY
  INQUIRY is a transaction to get bill information and status (paid or not paid).
  INPUT : SUBCRIBER NUMBER (IDPEL)
  OUTPUT : bill information, status
- PAYMENT
  PAYMENT is a transaction to set customer status as paid.
  INPUT : SUBSCRIBER NUMBER (IDPEL), Bill Period, Bill Amount
  OUTPUT : Success or Fail
- REVERSAL
  REVERSAL is a transaction to reverse customer status as not paid.
  INPUT : SUBSCRIBER NUMBER (IDPEL), Bill Period, Bill Amount , PLN-DJBB Reference Number
  OUTPUT : Success or Fail
- NETWORK MANAGEMENT
  NETWORK MANAGEMENT is transaction related to connection networking functions such as sign-on, sign-off, and echo.

Each message must be trailed by a negative byte value -1 (hexa -1x01 in JAVA/C) indicates end of message (EOM). The SWITCHING must be blocked, wait for a response from PLN-DJBB Gateway (synchronous). If a connection time-out was occurred (20-40 seconds were lapsed), SWITCHING can assume the network link was broken and response with TIMEOUT was occurred (for payment transaction see Failed Flow).

Message Sequence and Flow

Message sequence and flow can be illustrated as following:

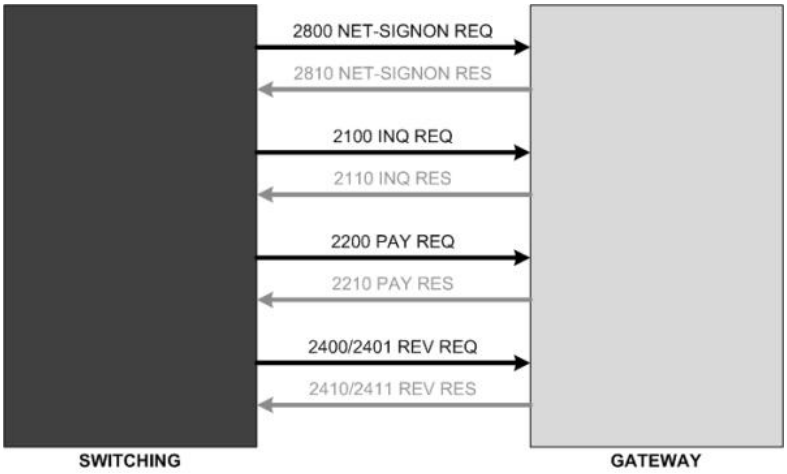

Figure 3. Global Message Flow

Before doing any transaction activities, SWITCHING must sign-on first by sending a message with type 2800 – Network Management Request and action 001 – Sign-On to GATEWAY with a predefined identification code (SWITCHING ID) provided by PLN-DJBB. If the SWITCHING signed-on successfully (described in response message sent by GATEWAY with type 2810 – Network Management Response), SWITCHING can do any transactions as long as available network connection to GATEWAY.

To enable bill payment, SWITCHING must send message type 2100 – Inquiry Request to PLN DJBB GATEWAY System. The key information must be send in this message is SUBSCRIBER NUMBER (IDPEL), the customer unique number. GATEWAY will response with message type 2110 – Inquiry Response, consists of customer bill related information and status such as period, amount, meter, etc.

If customer pays the bill, SWITCHING must send a message with type 2200 – Payment Request to GATEWAY. GATEWAY will flag the bill record in database as paid. GATEWAY will response with message type 2210 – Payment Response with appropriate response code and information. The key information in this message is the flagging status, success or fail.

If technical problem was occurred, broken network link for instance, there is possibility that SWITCHING does not get the payment response sent by GATEWAY. In this case, SWITCHING must sent message with type 2400 – Reversal Request to GATEWAY. By referencing this message, GATEWAY will try to unflag the bill status with several conditions verifications. If all conditions are met, GATEWAY will accept the reversal request and reversed bill status back to not paid and send a response message with type 2410 – Reversal Response. If SWITCHING still does not get the reversal response from GATEWAY, SWITCHING must sent message with type 2401 – Reversal Repeat Request. If SWITCHING still does not receive a reversal repeat response message from GATEWAY, SWITCHING must send the second reversal repeat request and wait for GATEWAY response message (message type 2411 – Reversal Repeat Response). These procedures must be taken and reported as

log along with reconciliation process as reference data to determine if a suspect transaction is accepted or not by PLN-DJBB.

SWITCHING also can check the GATEWAY service availability by sending message with type 2800 – Network Management Request and action 301 – Echo Test.

Detail message/protocol specification can be read at Attachment A.

SECTION 4
MESSAGE FLOW

While sending/receiving message, SWITCHING may get one of two following situations:

- Normal
- FAIL to get payment response message
- Late Response
- Repeat Reversal

SWITCHING must be aware of critical transaction such as payment when the situation is not NORMAL. SWITCHING must send reversal request if it was occurred and send maximum 2 reversal repeat request if SWITCHING does not get reversal response in a period of time. PLN-DJBB was recommended that the grace period for sending and receiving messages are 20 – 40 seconds. Grace period here means how long SWITCHING or GATEWAY must be wait the message before disconnecting the connection and assumes that other party or network is broken.

Normal Flow

Normal flow is a successful transaction (see Figure 4).

Following steps are normal flow:

1. SWITCHING sends message type 2100
2. GATEWAY responses with message type 2110
3. When customer pays the bill, SWITCHING will send message type 2200 to GATEWAY. This time, the message means to update customer bill status as 'paid'
4. GATEWAY will send message type 2210 contains payment request status

LEGEND:

INQ : Inquiry (asking bill information)
PAY : Payment (pay the bill)
REQ : Request
RES : Response

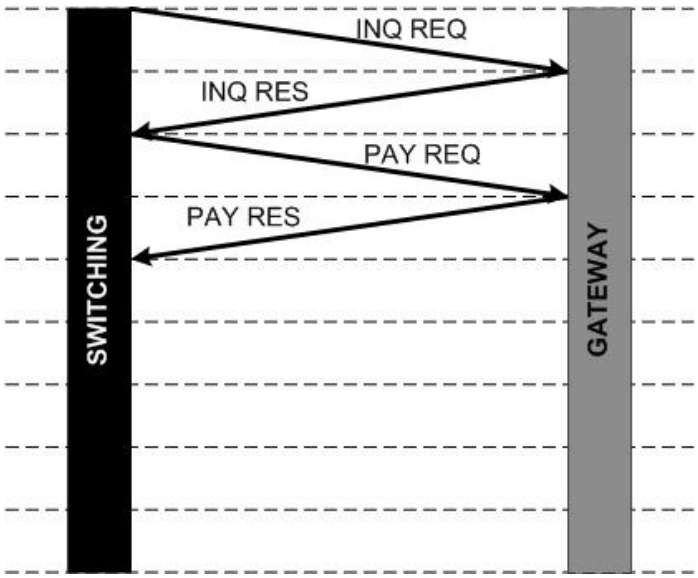

Figure 4. Normal Flow

Failed Flow

Failed transaction occurs when payment response message does not arrive in a period of time or SWITCHING send improper message stream (see Figure 5). Message does not arrive usually caused by failure of network or long-time processing in GATEWAY. In this condition SWITCHING can assume connection time-out was occurred. When the SWITCHING sends improper message, GATEWAY will send the exact message as sent by SWITCHING without further processing.

Following steps are example of failed flow for message does not arrive in period of time:

1. Same as step number 1-3 on Normal Flow
2. Same as step 4 on Normal Flow, but fail to reach SWITCHING
3. SWITCHING will wait for a period of time, then send message type 2400 – Reversal Request
4. GATEWAY sends the reversal response, message type 2410 – Reversal Response

LEGEND:

INQ : Inquiry (asking bill information)
PAY : Payment (pay the bill)
RVS : Reversal
RVR : Reversal-Repeat
REQ : Request
RES : Response

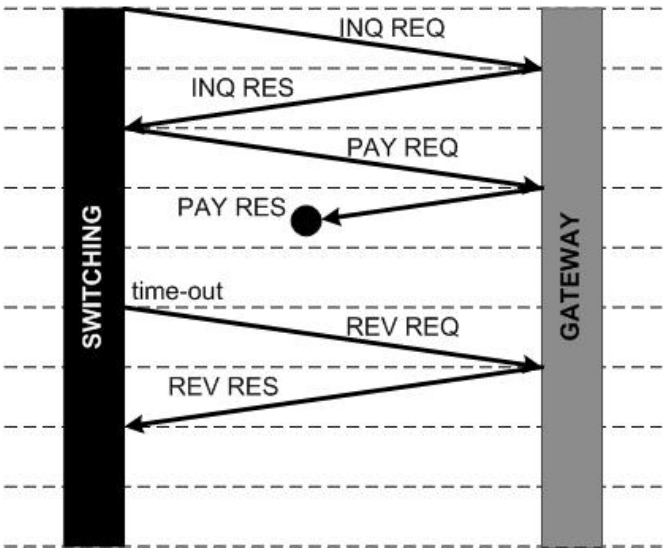

Figure 5. Failed Flow

Time-out (Late Response) Flow

Sometimes payment message response is arrived after specific of time (time-out).

Following steps are example of failed flow for message does not arrive in period of time:

1. Same as step number 1-3 on Normal Flow
2. Same as step 4 on Normal Flow, but GATEWAY was late to send the response
3. SWITCHING will wait for a period of time, then send message type 2400 – Reversal Request
4. GATEWAY sends the reversal response, message type 2410 – Reversal Response
5. SWITCHING receive message type 2210 after grace period (time-out). SWITCHING must consider that it is a failed transaction.

LEGEND:

INQ : Inquiry (asking bill information)
PAY : Payment (pay the bill)
RVS : Reversal
RVR : Reversal-Repeat
REQ : Request
RES : Response

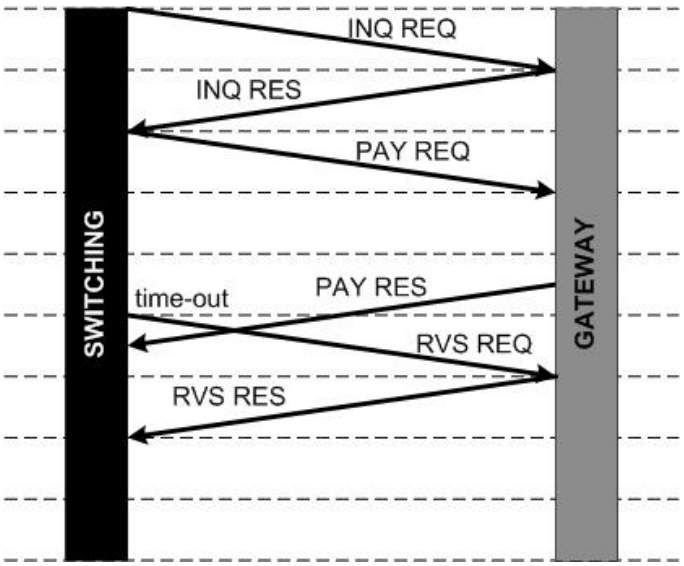

Figure 6. Time-out Flow

Repeat Reversal Flow

Repeat reversal flow usually occurs if first reversal request was failed/time-out.

Following steps are example of failed flow for message does not arrive in period of time:

1. Same as step number 1-3 on Normal Flow
2. Same as step 4 on Normal Flow, but GATEWAY was late to send the response
3. SWITCHING will wait for a period of time, then send message type 2400 – Reversal Request
4. But GATEWAY does not send the reversal response. SWITCHING must send message type 2401 - Reversal Repeat Request.
5. If success, GATEWAY will send reversal response

LEGEND:

INQ : Inquiry (asking bill information)
PAY : Payment (pay the bill)
RVS : Reversal
RVR : Reversal-Repeat
REQ : Request
RES : Response

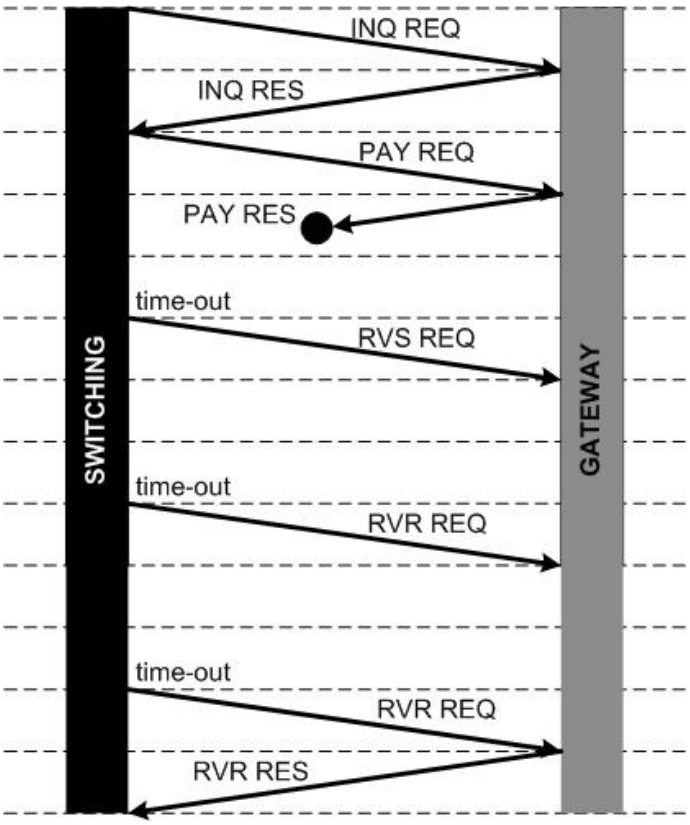

Figure 7. Repeat Reversal Flow

SECTION 5
RECONCILIATION

What is Reconciliation?

Reconciliation is the process of matching all payment transaction report from between GATEWAY and SWITCHING. Result of reconciliation report is equal payment transaction data between both parties.

Every working day, Collecting Agent (CA) is responsible for consolidating and matching all the transaction files. These files come from GATEWAY and SWITCHING. Reconciliation is based on settlement date which is stated in payment response from GATEWAY. Settlement date determine which transaction must be reported in certain date. The settlement time is defined by PLN-DJBB. Currently is set to 23:59:59. With this setting, all transactions occur between 00:00:00 – 23:59:59 in the same day, must be reported as one day transaction.

GATEWAY is always available for payment except the GATEWAY send information *cut-off* in its response message.

Based on reconciliation result, CA will transfer transaction fund to PLN-DJBB account in the next day (transaction day + 1).

All parties must develop reconciliation application to support reconciliation process based on each party responsibility.

Reconciliation Process Flow and Timing

Reconciliation process can be illustrated as following:

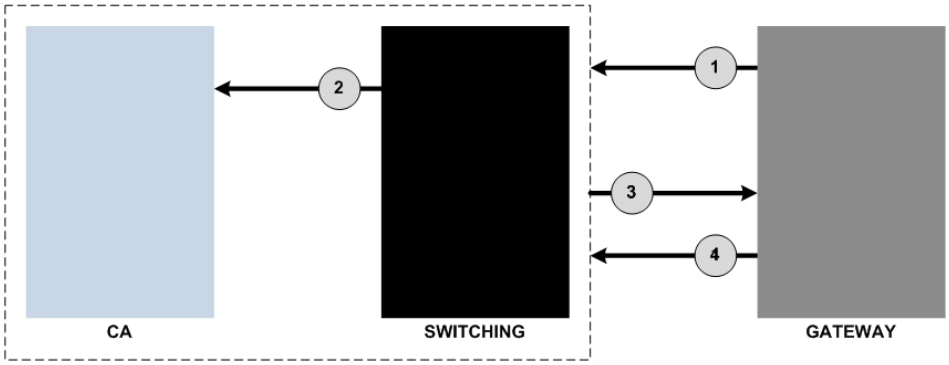

Figure 8. Reconciliation Process Flow

NO	TIME	ACTIVITY	ACTOR
1	(D+1) 00:00 – 08:00	Transaction Data Generation AAAAAAA-53501-CCYYMMDD.txt AAAAAAA-53501-CCYYMMDD.txt.ctl These files are stored in PLN-DJBB FTP Server (10.2.12.253:21, user/pwd is defined by PLN-DJBB), path: post/transaction. After SWITCHING download .txt, move these files to path post/transaction/process. CAUTION: DO NOT download file .txt if is no .txt.ctl	PLN-DJBB
2	(D+1) 00:00 – 08:00	Transaction Data Generation AAAAAAA-53501-CCYYMMDD.ftr AAAAAAA-53501-CCYYMMDD.ftr.ctl These files are stored in SWITCHING FTP Server (server and user/pwd are defined by SWITCHING).	SWITCHING
3	(D+1) 08:00 – 10:00	Reconciliation process between CA and SWITCHING by comparing .txt (downloaded by SWITCHING for CA) and .ftr, with suspect transaction in AAAAAAA-53501-CCYYMMDD.rcn as the result may contains *cancel* or *force* payment transaction. Store location is defined by SWITCHING. These files must be uploaded to PLN-DJBB FTP Server in path: post/suspect. If the .rcn contains suspect transactions, SWITCHING must provide file AAAAAAA-53501-CCYYMMDD.log contains log information (specification can be read at Attachment D)	SWITCHING-CA
4	(D+1) 10:00 – 12:00	PLN-DJBB processes .rcn with final suspect transaction in AAAAAAA-53501-CCYYMMDD.fcn as the result contains approved or not of *cancel* or *force* transaction. PLN-DJBB will store this file in PLN-DJBB FTP Server, path: post/final. SWITCHING can download this file if there is AAAAAAA-53501-CCYYMMDD.fcn.ctl file.	PLN-DJBB, SWITCHING

5	(D+1) 12:00 – 13:00	Final Report Generation of transaction fund must be transferred into PLN-DJBB account	SWITCHING
6	(D+1) 13:00 – 15:00	Time to Transfer of transaction fund to PLN-DJBB account based on Final Report	CA

LEGEND:

D : Transaction Day
D+1 : Transaction Day + 1
AAAAAAA : 7 digits of Switching Identification Code
CCYYMMDD : Transaction day, e.g. 20080401 means April 1st, 2008

All generated files in reconciliation process (.txt, .ftr, .rcn, .fcn) are:

- Containing per month-bill row (NOT per transaction). If there are two bills in one transaction (payment), then there are two rows in the reconciliation file.
- Text file with pipe (|) delimiter separated values.

HINT: You can open or import this file with Excel using CSV format and define the pipe (|) character as value delimiter.

- Always have header (first row) and checksum row (last row). Reconciliation file without transaction minimal contains 2 rows: header row and checksum row.

Detail reconciliation file specification can be read at Attachment B.

All control files for each reconciliation files (.txt.ctl, .ftr.ctl, .rcn.ctl, .fcn.ctl) are:

- Text file with pipe (|) delimiter separated values.
- Only have one row contains total number transaction (bill month payment) and total amount of transaction.

Detail reconciliation control file specification can be read at Attachment C.

Days of Reconciliation File Generation

Reconciliation can be done in working day only (Monday – Friday). According to this condition, there are three reconciliation types:

1. Type-1 Reconciliation, transaction was settled on Monday-Thursday will be reconciled on day D+1. Reconciliation file contains transaction with that settlement day only.
2. Type-2 Reconciliation, transaction was settled on Friday up to Sunday will be reconciled on consecutive Monday or next first working day. Reconciliation file contains transactions settled on Friday up to Sunday.
3. Type-3 Reconciliation, transaction was occurred in non working days or holidays will be reconciled on next first working day. Reconciliation file contains previous day of first holiday and holiday transactions.

PLEASE READ THE FOLLOWING TERMS CAREFULLY:

1. Reconciliation is based on settlement date NOT transaction date.
2. Date in reconciliation filename is reconciliation date (when reconciliation was taken)
3. Filename pattern is: AAAAAAA-53501-CCYYMMDD, AAAAAAA = Switching Identification Code (defined by PLN-DJBB), 53501 = PAN for Postpaid, CCYY = Year with century (4 digits), MM = month (2 digits, zero left-padding), DD = date (2 digits, zero left-padding)
4. Reconciliation file is always generated and reconciliation is always taken even there is no transactions ("empty recon file" contains header and checksum rows only)

Example of Type-1 Reconciliation:

- Transaction with settlement date is Monday, April 7th, 2008
- Reconciliation date is Tuesday, April 8th, 2008 and reconciliation process will be taken on Tuesday, April 8th, 2008
- Reconciliation Files:
    - PLN-DJBB Transaction Report (AAAAAAA-53501-20080408.txt)
    - SWITCHING Transaction Report (AAAAAAA-53501-20080408.ftr)
    - CA Reconciliation (Suspect) Report (AAAAAAA-53501-20080408.rcn)
    - PLN-DJBB Final Reconciliation (Suspect) Result Report (AAAAAAA-53501-20080408.fcn)

Example of Type-2 Reconciliation:

- Transaction with settlement date is Friday, April 11th, 2008
- Reconciliation date is Monday, April 14th, 2008 and reconciliation process will be taken on Monday, April 14th, 2008
- Reconciliation Files:
    - PLN-DJBB Transaction Report (AAAAAAA-53501-20080414.txt)
    - SWITCHING Transaction Report (AAAAAAA-53501-20080407.ftr)
    - CA Reconciliation (Suspect) Report (AAAAAAA-53501-20080414.rcn)
    - PLN-DJBB Final Reconciliation (Suspect) Result Report (AAAAAAA-53501-20080414.fcn)

Example of Type-3 Reconciliation:

- Transaction with settlement date is Thursday, May 1st, 2008 (holiday). In this case, the reconciliation for settlement date on Wednesday, April 31st, 2008 also included.
- Reconciliation date is Friday, May 2nd, 2008 and reconciliation process will be taken on Friday, May 2nd, 2008
- Reconciliation Files:
    - PLN-DJBB Transaction Report (AAAAAAA-53501-20080502.txt)
    - SWITCHING Transaction Report (AAAAAAA-53501-20080502.ftr)
    - CA Reconciliation (Suspect) Report (AAAAAAA-53501-20080502.rcn)
    - PLN-DJBB Final Reconciliation (Suspect) Result Report (AAAAAAA-53501-20080502.fcn)

SECTION 6
CONNECTION TESTING

Development

PLN-DJBB provides dedicated Development Application Server for development phase. This server has address 10.2.12.253:63100. Switching can connect to this server to test its application. Subscriber ID (IDPEL) for testing purpose can be achieved from PLN-DJBB data center administrator. Please read following procedures how to do connection and functional testing using Development Application Server:

- Propose to PLN-DJBB Gateway Administrator to get a Switching Identification Code. These 7-digits must be registered at Gateway and sent as Switching ID in message stream. Each switching must have a unique identification code. If a switching sent message stream without a Switching ID or with an invalid/unregistered Switching ID, Gateway will responses with Unregistered Switching (response code = 0032).
- Register your 7-digits (number only) of bank code as switching partner. Bank Code is defined by Bank Indonesia (BI) as 3-digits of code. For compliance reason, switching can add zero right-padding to the code, e.g. if Bank X has BI Code 001, then the bank code must be registered to Gateway is 0010000. This information also must be sent as Bank Code in message stream. If a switching sent message stream without a Bank Code or with an invalid/unregistered Bank Code for the Switching ID, Gateway will response with Unregistered Bank Code (response code = 0031).

User Acceptance Test (UAT)

After development testing has been completed, switching can propose to PLN-DJBB to do a UAT. UAT will use Development Application Server connected to Development Database Server containing about 40 millions of records (month bills). The UAT result will determine a switching can start its operational or not using Production Gateway. UAT document can be obtained as separated document.

UAT scopes the following testing types:

- Functional Testing
  Test every implemented functions and check if the responses as expected or not (true/false). The testing items are described in UAT document.
- Performance Testing
  Customer service is one of primary concerns of PLN-DJBB. To serve better, switching as one of the service components must comply with all following performance constraints:
  - Switching application must have speed to complete transactions with minimum 150 transactions per seconds (TPS). The testing scenario are:
    - Create a testing driver (client) application for switching application to simulate 1.000 transactions hit the switching application.
    - Get the start time and end time of execution to get how long the switching to complete those transactions.

TPS = 1.000 / time to complete (in seconds)

  - Switching must complete a transaction (inquiry or payment) maximum in 5 seconds (response time/RT). Time to complete also indicates the longest transaction has been taken, with maximum execution must be in 5 seconds also.

RT = time to complete (in seconds) / 1.000

Based on UAT result, PLN-DJBB will give further instruction how to connect to Production Application Server (Gateway) and ready for daily operations.

ATTACHMENT A
MESSAGE/PROTOCOL SPECIFICATION

Network Management Request Message

Message Type Identifier : 2800

Sender : SWITCHING

Purpose : Request network management action to GATEWAY

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2800 = NetMan Request	YES	
2	Bit Map		h	16		Bit Map 0010000001010000 = use field 12, 40, 48 of ISO8583:2003 Data Element	YES	1
3	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Date & Time of local transaction	YES	12
4	Action Code		n	3		001 = sign-on 002 = sign-off 301 = echo test	YES	40
5	Length of Additional Private Data		n	3	zero left-padding	Length of additional private data (sub field of data element 48) for MTI=2800 Sum of sub-fields length 007	YES	48
6	Additional Private Data						YES	48
		Switcher ID	an	7	zero left-padding	Switcher Identification Code (provided by PLN) 0000000	Custom (sub data element 48:1)	48

Network Management Response Message

Message Type Identifier : 2810

Sender : GATEWAY

Purpose : Response the network management action request to SWITCHING

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2810 = NetMan Response	YES	
2	Bit Map		h	16		Bit Map 0010000003010000 = use field 12, 39, 40, 48 of ISO8583 Data Element	YES	1
3	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Date & Time of local transaction	YES	12
4	Response Code		n	4		0000 = successful 0005 = ERROR - Other 0011 = ERROR - Need to sign-on 0030 = ERROR - Invalid message 0032 = ERROR - Unregistered Switching 0068 = ERROR - Timeout 0090 = ERROR - Cut-off is in progress	YES	39
5	Action Code		n	3		001 = sign-on 002 = sign-off 301 = echo test	YES	40
6	Length of Additional Private Data		n	3	zero left-padding	Length of additional private data (sub field of data element 48) for MTI=2810 Sum of sub-fields length 007	YES	48
7	Additional Private Data						YES	48

		Switcher ID	an	7	zero left-padding	Identical to same field in network management request message	Custom (sub data element 48:1)	48

Inquiry Request Message

Message Type Identifier : 2100

Sender : SWITCHING

Purpose : Request bill information of a customer to GATEWAY

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2100 = Inquiry Request	YES	
2	Bit Map		h	16		Primary Bitmap 4030004100010000 = use field 2, 11, 12, 26, 32, 48 of ISO8583:2003 Data Element	YES	1
3	Length of PAN		n	2	zero left-padding	Length of PAN 05	YES	2
4	Primary Account Number (PAN)	X	n	5		Billing Provider (2 chars, left zero padding) + Product ID (3 chars, left zero padding) Billing Provider = 53 (DJBB), Product ID = 501 (POST-PAID) 53501	YES	2
5	Switcher Trace Audit Number		n	12		Switcher Trace Audit Number 000000000000	YES	11
6	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Date & Time of local transaction	YES	12

7	Merchant Category Code		n	4		6010 = Teller 6011 = ATM 6012 = POS 6013 = AutoDebit/giralisasi 6014 = Internet 6015 = Kiosk 6016 = Phone Banking / Call Center 6017 = Mobile Banking 6018 = EDC	YES	26
8	Length of Bank Code		n	2	zero left-padding	Length of Bank Code 07		32
9	Bank Code		an	7	zero left-padding	Bank Code (defined by Bank Indonesia)	YES	32
10	Length of Additional Private Data		n	3	zero left-padding	Length of additional private data (sub field of data element 48) for MTI=2100 Sum of sub-fields length 019	YES	48
11	Additional Private Data						YES	48
		Switcher ID	an	7	zero left-padding	Switcher Identification Code (provided by PLN) 0000000	Custom (sub data element 48:1)	48
		Subscriber ID	n	12	space left-padding	Subscriber ID 000000000000	Custom (sub data element 48:2)	48

Inquiry Response Message

Message Type Identifier : 2110

Sender : GATEWAY

Purpose : Response the inquiry request to SWITCHING

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2110 = Inquiry Response	YES	
2	Bit Map		h	16		Primary Bitmap 5030004102000000 = use field 2, 4, 11, 12, 26, 32, 39, 48 of ISO8583:2003 Data Element	YES	1
3	Length of PAN		n	2	zero left-padding	Identical to same field in inquiry request message	YES	2
4	Primary Account Number (PAN)		n	5		Identical to same field in inquiry request message	YES	2
5	Transaction Amount		n	16			YES	4
		ISO Currency Code	n	3		ISO Currency Code Indonesian Rupiah = 360 360	YES	4
		Currency Minor Unit	n	1		Number of decimal value 0 = no decimal value n = n-last digits of value amount are decimal values 0	YES	4
		Value Amount	n	12	zero left-padding	Transaction Amount TA = RPTAG + RPBK 000000000000	YES	
6	Switcher Trace Audit Number		n	12		Identical to same field in inquiry request message	YES	11

7	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Identical to same field in inquiry request message	YES	12
8	Merchant Category Code		n	4		Identical to same field in inquiry request message	YES	26
9	Length of Bank Code		n	2	zero left-padding	Identical to same field in inquiry request message		32
10	Bank Code		an	7	zero left-padding	Identical to same field in inquiry request message	YES	32
11	Response Code (RC)		n	4		0000 = successful 0005 = ERROR - Other 0011 = ERROR - Need to sign-on 0014 = ERROR - Unknown Subscriber 0030 = ERROR - Invalid message 0031 = ERROR - Unregistered Bank Code 0032 = ERROR - Unregistered Switching 0033 = ERROR - Unregistered Product 0068 = ERROR - Timeout 0088 = ERROR - Bills already paid 0089 = ERROR - Current bill is not available 0090 = ERROR - Cut-off is in progress	YES	39
12	Length of Additional Private Data		n	3	zero left-padding	Length of additional private data (sub field of data element 48) for MTI=2110 Sum of sub-fields length 019 if RC != 0000 232 if RC = 0000 & BS = 1 343 if RC = 0000 & BS = 2 454 if RC = 0000 & BS = 3 565 if RC = 0000 & BS = 4	YES	48
13	Additional Private Data						YES	48
		Switcher ID	an	7	zero left-padding	Identical to same field in inquiry request message	Custom (sub data element 48:1)	48

		Subscriber ID	n	12	zero left-padding	Identical to same field in inquiry request message	Custom (sub data element 48:2)	48
		Bill Status (BS)	n	1		Status of subscribe bills 0 = Current month bill not available 1 = Biller send 1 bill 2 = Biller send 2 bills 3 = Biller send 3 bills 4 = Biller send 4 bills 9 = All bills already paid (including current month bill) Available if RC=0000	Custom (sub data element 48:3)	48
		Total Outstanding Bill	n	2	zero left-padding	Number of outstanding bills 01 = 1 total outstanding bills ..... nn = nn total outstanding bills Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:4)	48
		PLN Reference Number	an	32		PLN Reference Number Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:5)	48
		Subscriber Name	an	25	space right-padding	Subscriber Name Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:6)	48
		Service Unit (SU)	an	5		Service Unit (KDUP) Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:7)	48
		Service Unit Phone (SUP)	n	15	space right-padding	Service Unit Phone (SUP) Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:8)	48
		Subscriber Segmentation	an	4	space right-padding	Customer Segmentation Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:9)	48
		Power Consuming Category	n	9	zero left-padding	Power Consuming Category Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:10)	48

		Total Admin Charges	n	9	zero left-padding	Total Administration Charges Currently is always 000000000 Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:11)	48
		Bill Period (repeated)	n	6	CCYYMM	Month and Year (BLTH) of bill to be paid Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:12)	48
		Due Date (repeated)	n	8	DDMMCCYY	Due date of bill payment Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:13)	48
		Meter Read Date (repeated)	n	8	DDMMCCYY	Date when the subscribed meter was read. Currently is reserved (not available yet) and set to CCYYMMDD Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:14)	48
		Total Electricity Bill (repeated)	n	11	zero left-padding	Electricity bill (RPTAG) to be paid Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:15)	48
		Incentive (repeated)	xn	11		Electricity bill incentive Available if RC=0000 and BS in [1..4] C0000000000 = incentive (Total Electricity bill contains incentive value) D0000000000 = discentive (Total Electricity bill contains discentive value)	Custom (sub data element 48:16)	48
		Value Added Tax* (repeated)	n	10	zero left-padding	To be used for Jasa Inkaso Calculation Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:17)	48
		Penalty Fee (repeated)	n	9	zero left-padding	Penalty fee (RPBK) to be paid Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:18)	48
		Previous Meter Reading 1 (repeated)	n	8	zero left-padding	Last month meter reading SLALWBP Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:19)	48

		Current Meter Reading 1 (repeated)	n	8	zero left-padding	Current month meter reading SAHLWBP Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:20)	48
		Previous Meter Reading 2 (repeated)	n	8	zero left-padding	SLAWBP Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:21)	48
		Current Meter Reading 2 (repeated)	n	8	zero left-padding	SAHWBP Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:22)	48
		Previous Meter Reading 3 (repeated)	n	8	zero left-padding	SLAKVARH Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:23)	48
		Current Meter Reading 3 (repeated)	n	8	zero left-padding	SAHKVARH Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:24)	48

Payment Request Message

Message Type Identifier : 2200

Sender : SWITCHING

Purpose : Request bill payment

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2200 = Payment Request	YES	
2	Bit Map		h	16		Primary Bitmap 5030004100010000 = use field 2, 4, 11, 12, 26, 32, 48 of ISO8583:2003 Data Element	YES	1
3	Length of PAN		n	2	zero left-padding	Length of PAN 05	YES	2
4	Primary Account Number (PAN)		n	5		Billing Provider (2 chars, left zero padding) + Product ID (3 chars, left zero padding) Billing Provider = 53 (DJBB), Product ID = 501 (POST-PAID) 53501	YES	2
5	Transaction Amount		n	16			YES	4
		ISO Currency Code	n	3		Must be identical to same field in inquiry response message	YES	4
		Currency Minor Unit	n	1		Must be identical to same field in inquiry response message	YES	4
		Value Amount	n	12	zero left-padding	Must be identical to same field in inquiry response message	YES	
6	Switcher Trace Audit Number		n	12		Must be identical to same field in inquiry response message	YES	11
7	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Date & Time of local transaction	YES	12

8	Merchant Category Code		n	4		Must be identical to same field in inquiry response message	YES	26
9	Length of Bank Code		n	2	zero left-padding	Must be identical to same field in inquiry response message		32
10	Bank Code		an	7	zero left-padding	Must be identical to same field in inquiry response message	YES	32
11	Length of Additional Private Data		n	3	zero left-padding	Length of additional private data (sub field of data element 48) for MTI=2200 Sum of sub-fields length 265 if PS = 1 376 if PS = 2 487 if PS = 3 598 if PS = 4	YES	48
12	Additional Private Data						YES	48
		Switcher ID	an	7	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:1)	48
		Subscriber ID	n	12	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:2)	48
		Bill Status (BS)	n	1		Status of subscribe bills 1 = Biller send 1 bill 2 = Biller send 2 bills 3 = Biller send 3 bills 4 = Biller send 4 bills	Custom (sub data element 48:3)	48
		Payment Status (PS)	n	1		Number of bill will be paid (currently must be equal to Bill Status) Valid values [1..4]	Custom (sub data element 48:4)	48
		Total Outstanding Bill	n	2	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:5)	48
		PLN Reference Number	an	32		Must be identical to same field in inquiry response message	Custom (sub data element 48:6)	48

		Switcher Receipt Reference Number	an	32		Reference Number for Transaction Tracking (must be printed in receipt)	Custom (sub data element 48:7)	48
		Subscriber Name	an	25	space right-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:8)	48
		Service Unit (SU)	an	5		Must be identical to same field in inquiry response message	Custom (sub data element 48:9)	48
		Service Unit Phone (SUP)	an	15		Service Unit Phone (SUP) Available if RC=0000 and BS in [1..4]	Custom (sub data element 48:10)	48
		Subscriber Segmentation	an	4	space right-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:11)	48
		Power Consuming Category	n	9	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:12)	48
		Total Admin Charges	n	9	zero left-padding	Total Administration Charges Currently is always 000000000	Custom (sub data element 48:13)	48
		Bill Period (repeated)	n	6	CCYYMM	Must be identical to same field in inquiry response message	Custom (sub data element 48:14)	48
		Due Date (repeated)	n	8	DDMMCCYY	Must be identical to same field in inquiry response message	Custom (sub data element 48:15)	48
		Meter Read Date (repeated)	n	8	DDMMCCYY	Must be identical to same field in inquiry response message	Custom (sub data element 48:16)	48
		Total Electricity Bill (repeated)	n	11	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:17)	48
		Incentive (repeated)	xn	11		Must be identical to same field in inquiry response message	Custom (sub data element 48:18)	48

		Value Added Tax* (repeated)	n	10	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:19)	48
		Penalty Fee (repeated)	n	9	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:20)	48
		Previous Meter Reading 1 (repeated)	n	8	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:21)	48
		Current Meter Reading 1 (repeated)	n	8	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:22)	48
		Previous Meter Reading 2 (repeated)	n	8	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:23)	48
		Current Meter Reading 2 (repeated)	n	8	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:24)	48
		Previous Meter Reading 3 (repeated)	n	8	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:25)	48
		Current Meter Reading 3 (repeated)	n	8	zero left-padding	Must be identical to same field in inquiry response message	Custom (sub data element 48:26)	48

Payment Response Message

Message Type Identifier : 2210

Sender : GATEWAY

Purpose : Response the payment request to SWITCHING

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2210 = Payment Response	YES	
2	Bit Map		h	16		Primary Bitmap 5032004102010000 = use field 2, 4, 11, 12, 15, 26, 32, 39, 48 of ISO8583:2003 Data Element	YES	1
3	Length of PAN		n	2	zero left-padding	Identical to same field in payment request message	YES	2
4	Primary Account Number (PAN)		n	5		Identical to same field in payment request message	YES	2
5	Transaction Amount		n	16			YES	4
		ISO Currency Code	n	3		Identical to same field in payment request message	YES	4
		Currency Minor Unit	n	1		Identical to same field in payment request message	YES	4
		Value Amount	n	12	zero left-padding	Identical to same field in payment request message	YES	
6	Switcher Trace Audit Number		n	12		Identical to same field in payment request message	YES	11
7	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Identical to same field in payment request message	YES	12

9	Date, Settlement		n	8	CCYYMMDD	Date of settlement (refer to PLN cut-off for reconciliation purpose) For instance, if cut-off at 16:00:00 (PLN Gateway Time), then all payment start from 16:00:01 must be reconciled as next-day transaction	YES	15
9	Merchant Category Code		n	4		Identical to same field in payment request message	YES	26
10	Length of Bank Code		n	2	zero left-padding	Identical to same field in payment request message		32
11	Bank Code		an	7	zero left-padding	Identical to same field in payment request message	YES	32
12	Response Code (RC)		n	4		0000 = successful 0005 = ERROR - Other 0011 = ERROR - Need to sign-on 0013 = ERROR - Invalid Transaction Amount 0014 = ERROR - Unknown Subscriber 0030 = ERROR - Invalid message 0031 = ERROR - Unregistered Bank Code 0032 = ERROR - Unregistered Switching 0033 = ERROR - Unregistered Product 0068 = ERROR - Timeout 0088 = ERROR - Bills already paid 0089 = ERROR - Current bill is not available 0090 = ERROR - Cut-off is in progress 0092 = ERROR - Switcher Receipt Reference Number is not available 0093 = ERROR - Invalid Switcher Reference Number 0097 = ERROR - Switching ID and/or Bank Code is not identical with inquiry 0098 = ERROR - PLN Ref Number is not valid	YES	39

13	Length of Additional Private Data		n	3	zero left-padding	Identical to same field in payment request message	YES	48
14	Additional Private Data						YES	48
		Switcher ID	an	7	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:1)	48
		Subscriber ID	n	12	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:2)	48
		Bill Status (BS)	n	1		Identical to same field in payment request message	Custom (sub data element 48:3)	48
		Payment Status (PS)	n	1		Identical to same field in payment request message	Custom (sub data element 48:4)	48
		Total Outstanding Bill	n	2	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:5)	48
		PLN Reference Number	an	32		Identical to same field in payment request message	Custom (sub data element 48:6)	48
		Switcher Receipt Reference Number	an	32		Identical to same field in payment request message	Custom (sub data element 48:7)	48
		Subscriber Name	an	25	space right-padding	Identical to same field in payment request message	Custom (sub data element 48:8)	48
		Service Unit (SU)	an	5		Identical to same field in payment request message	Custom (sub data element 48:9)	48
		Service Unit Phone (SUP)	an	15		Identical to same field in payment request message	Custom (sub data element 48:10)	48
		Subscriber Segmentation	an	4	space right-padding	Identical to same field in payment request message	Custom (sub data element 48:11)	48

		Power Consuming Category	n	9	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:12)	48
		Total Admin Charges	n	9	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:13)	48
		Bill Period (repeated)	n	6	CCYYMM	Identical to same field in payment request message	Custom (sub data element 48:14)	48
		Due Date (repeated)	n	8	DDMMCCYY	Identical to same field in payment request message	Custom (sub data element 48:15)	48
		Meter Read Date (repeated)	n	8	DDMMCCYY	Identical to same field in payment request message	Custom (sub data element 48:16)	48
		Total Electricity Bill (repeated)	n	11	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:17)	48
		Incentive (repeated)	xn	11		Must be identical to same field in inquiry response message	Custom (sub data element 48:18)	48
		Value Added Tax* (repeated)	n	10	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:19)	48
		Penalty Fee (repeated)	n	9	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:20)	48
		Previous Meter Reading 1 (repeated)	n	8	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:21)	48
		Current Meter Reading 1 (repeated)	n	8	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:22)	48
		Previous Meter Reading 2 (repeated)	n	8	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:23)	48

		Current Meter Reading 2 (repeated)	n	8	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:24)	48
		Previous Meter Reading 3 (repeated)	n	8	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:25)	48
		Current Meter Reading 3 (repeated)	n	8	zero left-padding	Identical to same field in payment request message	Custom (sub data element 48:26)	48

Reversal (Repeat) Request Message

Message Type Identifier : 2400 / 2401

Sender : SWITCHING

Purpose : Request to reverse a payment transaction

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2400 = Reversal Request 2401 = Reversal Repeat Request (2x)	YES	
2	Bit Map		h	16		Primary Bitmap 5030004100010100 = use field 2, 4, 11, 12, 26, 32, 48, 56 of ISO8583:2003 Data Element	YES	1
3	Length of PAN		n	2	zero left-padding	Length of PAN 05	YES	2
4	Primary Account Number (PAN)		n	5		Must be identical to same field in payment inquiry message	YES	2
5	Transaction Amount		n	16			YES	4
		ISO Currency Code	n	3		Must be identical to same field in payment inquiry message	YES	4
		Currency Minor Unit	n	1		Must be identical to same field in payment inquiry message	YES	4
		Value Amount	n	12	zero left-padding	Must be identical to same field in payment inquiry message	YES	4
6	Switcher Trace Audit Number		n	12		Must be identical to same field in payment inquiry message	YES	11
7	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Date & Time of local transaction	YES	12
8	Merchant Category Code		n	4		Must be identical to same field in payment inquiry message	YES	26
9	Length of Bank Code		n	2	zero left-padding	Length of Bank Code 07		32

10	Bank Code		n	7	zero left-padding	Must be identical to same field in payment inquiry message	YES	32
11	Length of Additional Private Data		n	3	zero left-padding	Length of additional private data (sub field of data element 48) for MTI=2400 or MTI=2401 Sum of sub-fields length 233 if PS = 1 344 if PS = 2 455 if PS = 3 566 if PS = 4	YES	48
12	Additional Private Data						YES	48
		Switcher ID	an	7	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:1)	48
		Subscriber ID	n	12	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:2)	48
		Bill Status (BS)	n	1		Must be identical to same field in payment inquiry message	Custom (sub data element 48:3)	48
		Payment Status (PS)	n	1		Must be identical to same field in payment inquiry message	Custom (sub data element 48:4)	48
		Total Outstanding Bill	n	2	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:5)	48
		PLN Reference Number	an	32		Must be identical to same field in payment inquiry message	Custom (sub data element 48:6)	48
		Switcher Receipt Reference Number	an	32		Must be identical to same field in payment inquiry message	Custom (sub data element 48:7)	48
		Subscriber Name	an	25	space right-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:8)	48

		Service Unit (SU)	an	5		Must be identical to same field in payment inquiry message	Custom (sub data element 48:9)	48
		Service Unit Phone (SUP)	an	15		Must be identical to same field in payment inquiry message	Custom (sub data element 48:10)	48
		Subscriber Segmentation	an	4	space right-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:11)	48
		Power Consuming Category	n	9	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:12)	48
		Total Admin Charges	n	9	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:13)	48
		Bill Period (repeated)	n	6	CCYYMM	Must be identical to same field in payment inquiry message	Custom (sub data element 48:14)	48
		Due Date (repeated)	n	8	DDMMCCYY	Must be identical to same field in payment inquiry message	Custom (sub data element 48:15)	48
		Meter Read Date (repeated)	n	8	DDMMCCYY	Must be identical to same field in payment inquiry message	Custom (sub data element 48:16)	48
		Total Electricity Bill (repeated)	n	11	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:17)	48
		Incentive (repeated)	xn	11		Must be identical to same field in inquiry response message	Custom (sub data element 48:18)	48
		Value Added Tax* (repeated)	n	10	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:19)	48
		Penalty Fee (repeated)	n	9	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:20)	48

		Previous Meter Reading 1 (repeated)	n	8	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:21)	48
		Current Meter Reading 1 (repeated)	n	8	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:22)	48
		Previous Meter Reading 2 (repeated)	n	8	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:23)	48
		Current Meter Reading 2 (repeated)	n	8	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:24)	48
		Previous Meter Reading 3 (repeated)	n	8	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:25)	48
		Current Meter Reading 3 (repeated)	n	8	zero left-padding	Must be identical to same field in payment inquiry message	Custom (sub data element 48:26)	48
13	Length of Original Data Element		n	2		Length of Original Data Element 37	YES	56
14	Original Data Element						YES	56
		Original MTI	n	4		MTI of Payment 2200	Custom (sub data element 56:1)	56
		Original Switcher Reference Number	n	12		Original Switcher Reference Number in payment request message	Custom (sub data element 56:2)	56
		Original Date & Time Local Transaction	n	14	CCYYMMDDhhmmss	Original Date & Time Local Transaction in payment request message	Custom (sub data element 56:3)	56
		Original Bank Code	n	7	zero left-padding	Original Bank Code in payment request message	Custom (sub data element 56:4)	56

Reversal (Repeat) Response Message

Message Type Identifier : 2410 / 2411

Sender : GATEWAY

Purpose : Response the reversal request to SWITCHING

FIELD	NAME	SUB FIELD	TYPE	LENGTH	FORMAT	DESCRIPTION	ISO8583:2003	
							STANDARD	DATA ELEMENT
1	MTI		n	4		Message Type Indicator 2410 = Reversal Response 2411 = Reversal Repeat Response	YES	
2	Bit Map		h	16		Bit Map 5030004102010100 = use field 2, 4, 11, 12, 26, 32, 39, 48, 56 of ISO8583:2003 Data Element	YES	1
3	Length of PAN		n	2	zero left-padding	Length of PAN 05	YES	2
4	Primary Account Number (PAN)		n	5		Identical to same field in reversal request message	YES	2
5	Transaction Amount		n	16			YES	4
		ISO Currency Code	n	3		Identical to same field in reversal request message	YES	4
		Currency Minor Unit	n	1		Identical to same field in reversal request message	YES	4
		Value Amount	n	12	zero left-padding	Identical to same field in reversal request message	YES	4
6	Switcher Trace Audit Number		n	12		Identical to same field in reversal request message	YES	11
7	Date & Time, Local Transaction		n	14	CCYYMMDDhhmmss	Identical to same field in reversal request message	YES	12
8	Merchant Category Code		n	4		Identical to same field in reversal request message	YES	26

9	Length of Bank Code		n	2	zero left-padding	Length of Bank Code 07		32
10	Bank Code		n	7	zero left-padding	Identical to same field in reversal request message	YES	32
11	Response Code (RC)		n	4		0000 = successful 0005 = ERROR - Other 0011 = ERROR - Need to sign-on 0012 = ERROR - Settlement had been done 0013 = ERROR - Invalid Transaction Amount 0014 = ERROR - Unknown Subscriber 0030 = ERROR - Invalid message 0031 = ERROR - Unregistered Bank Code 0032 = ERROR - Unregistered Switching 0033 = ERROR - Unregistered Product 0063 = ERROR - No payment 0068 = ERROR - Timeout 0090 = ERROR - Cut-off is in progress 0092 = ERROR - Switcher Receipt Reference Number is not available 0093 = ERROR - Invalid Switcher Reference Number 0094 = ERROR - Reversal had been done 0097 = ERROR - Switching ID and/or Bank Code is not identical with payment 0098 = ERROR - PLN Ref Number is not valid	YES	39
12	Length of Additional Private Data		n	3	zero left-padding	Identical to same field in reversal request message	YES	48
13	Additional Private Data						YES	
		Switcher ID	an	7	zero left-padding	Identical to same field in reversal request message	Custom (sub data element	48

							48:1)	
		Subscriber ID	n	12	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:2)	48
		Bill Status (BS)	n	1		Identical to same field in reversal request message	Custom (sub data element 48:3)	48
		Payment Status (PS)	n	1		Identical to same field in reversal request message	Custom (sub data element 48:4)	48
		Total Outstanding Bill	n	2	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:5)	48
		PLN Reference Number	an	32		Identical to same field in reversal request message	Custom (sub data element 48:6)	48
		Switcher Receipt Reference Number	an	32		Identical to same field in reversal request message	Custom (sub data element 48:7)	48
		Subscriber Name	an	25	space right-padding	Identical to same field in reversal request message	Custom (sub data element 48:8)	48
		Service Unit (SU)	an	5		Identical to same field in reversal request message	Custom (sub data element 48:9)	48
		Service Unit Phone (SUP)	an	15		Identical to same field in reversal request message	Custom (sub data element 48:10)	48
		Subscriber Segmentation	an	4	space right-padding	Identical to same field in reversal request message	Custom (sub data element 48:11)	48
		Power Consuming Category	n	9	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:12)	48
		Total Admin Charges	n	9	zero left-padding	Identical to same field in reversal request message	Custom (sub data element	48

							48:13)	
		Bill Period (repeated)	n	6	CCYYMM	Identical to same field in reversal request message	Custom (sub data element 48:14)	48
		Due Date (repeated)	n	8	DDMMCCYY	Identical to same field in reversal request message	Custom (sub data element 48:15)	48
		Meter Read Date (repeated)	n	8	DDMMCCYY	Identical to same field in reversal request message	Custom (sub data element 48:16)	48
		Total Electricity Bill (repeated)	n	11	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:17)	48
		Incentive (repeated)	xn	11		Must be identical to same field in inquiry response message	Custom (sub data element 48:18)	48
		Value Added Tax* (repeated)	n	10	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:19)	48
		Penalty Fee (repeated)	n	9	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:20)	48
		Previous Meter Reading 1 (repeated)	n	8	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:21)	48
		Current Meter Reading 1 (repeated)	n	8	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:22)	48
		Previous Meter Reading 2 (repeated)	n	8	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:23)	48
		Current Meter Reading 2 (repeated)	n	8	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:24)	48
		Previous Meter Reading 3 (repeated)	n	8	zero left-padding	Identical to same field in reversal request message	Custom (sub data element	48

							48:25)	
		Current Meter Reading 3 (repeated)	n	8	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 48:26)	56
14	Length of Original Data Element		n	2		Length of Original Data Element 37	YES	56
15	Original Data Element						YES	56
		Original MTI	n	4		Identical to same field in reversal request message	Custom (sub data element 56:1)	56
		Original Switcher Reference Number	n	12		Identical to same field in reversal request message	Custom (sub data element 56:2)	56
		Original Date & Time Local Transaction	n	14	CCYYMMDDhhmmss	Identical to same field in reversal request message	Custom (sub data element 56:3)	56
		Original Bank Code	n	7	zero left-padding	Identical to same field in reversal request message	Custom (sub data element 56:4)	56

```
NETWORK MANAGEMENT:SIGN-ON
REQUEST  : 2800001000000101000020080502072300001007100000D3
RESPONSE : 2810001000000301000020080502072300000000100710000D3

NETWORK MANAGEMENT:SIGN-OFF
REQUEST  : 2800001000000101000020080502072300002007100000D3
RESPONSE : 2810001000000301000020080502072300000000200710000D3

INQUIRY (1 BILL, TOTAL 1 BILL): OK
REQUEST  : 2100403000410001000005535011000000000012008050207230060150701100000191000D3530000000001
RESPONSE :
211050300041020000000553501360000000010000010000000000120080502072300601507011000001910000D353000000000023210000D3530000000001101E5BA37AC52083904FDEF185BE297009ASUBSCRIBER NAME
53585021-3754678    R1  00000045000000000020080420042008210320080000010000D0000000000000000000000000000000017450000175500000000000000000000000000000000

INQUIRY (2 BILL, TOTAL 2 BILL): OK
REQUEST  : 2100403000410001000005535011000000000012008050207230060150701100000191000D3530000000002
RESPONSE :
211050300041020000000553501360000000021300010000000000120080502072300601507011000000003431000D3530000000002202E5BA37AC52083904FDEF185BE297009ASUBSCRIBER NAME
2        53585021-3754678    R1
000000450000000000200803200320082102200800000110000D0000000000000000000000000030000017150000174500000000000000000000000000000000000020080420042008210320080000010
0000D0000000000000000000000000000000017450000175500000000000000000000000000000000

INQUIRY (4 BILL, TOTAL 6 BILL): OK
REQUEST  : 2100403000410001000005535011000000000012008050207230060150701100000191000D3530000000006
RESPONSE :
211050300041020000000553501360000000039300010000000000120080502072300601507011000000005651000D353000000000064O6E5BA37AC52083904FDEF185BE297009ASUBSCRIBER NAME
6        53585021-3754678    R1
000000450000000000200711201120072110200700000090000D0000000000000000000000000900000157500001610000000000000000000000000000000000020071220122007211120070000009
0000D0000000000000000000000000900000161000001645000000000000000000000000000000000000000020080120012008211220070000009000D0000000000000000000000000900000164500001780
000000000000000000000000000000000020080220022008210120080000009000D0000000000000000000000006000001680000017150000000000000000000000000000000000

PAYMENT (1 BILL, TOTAL 1 BILL): OK
REQUEST  :
220050300041000100000553501360000000010000010000000000120080502072300601507011000026510000D353000000000011101E5BA37AC52083904FDEF185BE297009A874CC544BF2663E46D
738268518F8F62SUBSCRIBER NAME          53585021-3754678    R1
000000450000000000200804200420082103200800000100000D0000000000000000000000000000000017450000175500000000000000000000000000000000000
RESPONSE :
221050300041020101000553501360000000010000010000000000120080502072300200805026015070110000000026510000D353000000000011101E5BA37AC52083904FDEF185BE297009A874CC5
44BF2663E46D738268518F8F62SUBSCRIBER NAME          53585021-3754678    R1
000000450000000000200804200420082103200800000100000D0000000000000000000000000000000017450000175500000000000000000000000000000000000
```

```
REVERSAL (1 BILL, TOTAL 1 BILL): OK
REQUEST  :
2400503000410001010005535013600000000100000100000000000120080502072300601507011000026510000D3530000000000011101E5BA37AC52083904FDEF185BE297009A874CC544BF2663E46D
738268518F8F62SUBSCRIBER NAME          53585021-3754678    R1
0000004500000000002008042004200821032008000001000000D0000000000000000000000000000000017450000175500000000000000000000000000000000000037220010000000000120080502072
3000110000
RESPONSE :
2410503000410001010005535013600000000100000100000000000120080502072300601507011000000002651000D3530000000000011101E5BA37AC52083904FDEF185BE297009A874CC544BF2663
E46D738268518F8F62SUBSCRIBER NAME          53585021-3754678    R1
0000004500000000002008042004200821032008000001000000D0000000000000000000000000000000017450000175500000000000000000000000000000000000037220010000000000120080502072
3000110000

REVERSAL REPEAT (1 BILL, TOTAL 1 BILL): OK
REQUEST  :
2401503000410001010005535013600000000100000100000000000120080502072300601507011000026510000D3530000000000011101E5BA37AC52083904FDEF185BE297009A874CC544BF2663E46D
738268518F8F62SUBSCRIBER NAME          53585021-3754678    R1
0000004500000000002008042004200821032008000001000000D0000000000000000000000000000000017450000175500000000000000000000000000000000000037220010000000000120080502072
3000110000
RESPONSE :
2411503000410001010005535013600000000100000100000000000120080502072300601507011000000002651000D3530000000000011101E5BA37AC52083904FDEF185BE297009A874CC544BF2663
E46D738268518F8F62SUBSCRIBER NAME          53585021-3754678    R1
0000004500000000002008042004200821032008000001000000D0000000000000000000000000000000017450000175500000000000000000000000000000000000037220010000000000120080502072
3000110000
```

ATTACHMENT B
RECONCILIATION SPECIFICATION

Transaction File by PLN-DJBB (.txt)

NO	COLUMN NAME	TYPE	LENGTH	FORMAT	DESCRIPTION	CHECKSUM ROW
1	Date & Time, Local Transaction	n	14	CCYYMMDDhhmmss	Date & Local time when the transaction takes place	CCYYMMDD000000
2	Switcher ID	an	7	zero left-padding	Switcher Identification Code	Switcher ID
3	Merchant Category Code	n	4	zero left-padding	Merchant Category Code	0000 (fixed)
4	PLN Reference Number	an	32		PLN Reference Number	Total number of transaction
5	Switcher Receipt Reference Number	an	32	space right-padding	Switcher Receipt Reference Number	00000000000000000000000000000000 (fixed)
6	Subscriber ID	n	12	space left-padding	Subscriber Identification Code	000000000000 (fixed)
7	Bill Period	n	6	CCYYMM	Bill period of paid bill	000000 (fixed)
8	Transaction Amount	n	12	zero left-padding	Total Amount Payable to PLN TA = RPTAG + RPBK	SUM (Transaction Amount)
9	Total Electricity Bill	n	11	zero left-padding	Amount Payable to PLN RPTAG	SUM(Total Electricity Bill)
10	Incentive / Disincentive	xn	11	Use + instead of D and - instead of C	Amount of electricity bill incentive	SUM(Incentive)
11	Value Added Tax*	n	10	zero left-padding	Reserved use by CA	SUM(Value Added Tax)
12	Penalty Fee	n	9	zero left-padding	Penalty fee for being late RPBK	SUM(Penalty Fee)
13	Bank Code	an	7	zero left-padding	Bank Code (defined by Bank Indonesia)	Bank Code

Example

```
DT|SWITCHERID|MERCHANT|REFNUM|SREFNUM|IDPEL|BL_TH|TRAN_AMOUNT|RP_TAG|RP_INSENTIF|VAT|RP_BK|BANKCODE
20080425200511|10000D3|6015|42F92924B6274C2588F2985DF0B780B4|5BB033B188CD4274A89CF6F9B14FE88D|536310101133|200804|000000136071|00000133071|0|0000000000|000003
000|0110000
20080425200948|10000D3|6015|45FCEE2A507A4E0EA91CCF212280CD9E|DB0ED751615347E8911BCC5E93A35561|536310101117|200804|000000029296|00000026296|0|0000000000|000003
000|0110000
20080425201041|10000D3|6015|243BA35AC14F4FAA8C05BA32BB3CF4E5|AC89C6029C9041199C2063D2860504B8|536310101095|200804|000000168161|00000165161|0|0000000000|000003
000|0110000
20080425201041|10000D3|6015|480CC490241C43BBA5DEF9CCE37F0222|74B16253178E4DF3A5E0079CC714D5D1|536310689165|200804|000000019995|00000016995|0|0000000000|000003
000|0110000
20080425205658|10000D3|6015|42B087D0FA67433395CAF32E6A0BEB96|E2F00DBB97D342B393425431B60827CF|536310250237|200804|000000093975|00000090975|0|0000000000|000003
000|0110000
20080425210430|10000D3|6015|FAB5E05463C94088A9307373A1A2BCA9|3FE2C8C3F0E945F4BF97A7E9226A8834|536310250229|200804|000000031330|00000028330|0|0000000000|000003
000|0110000
20080425211036|10000D3|6015|342FE6E55BF1459FB20FCC52914E4591|658047D187A849FEBC0F5AE9E7FA99CA|538413052348|200802|000000179828|00000173828|0|0000000000|000006
000|0110000
20080425221614|10000D3|6015|95A9B07B06C74730925F8A35EA89A0B9|5BCD4B58435D44169C89809B174BE114|538650954520|200802|000000099274|00000090274|0|0000000000|000009
000|0110000
20080425230629|10000D3|6015|68CD25ED89D7438DAFD97E29B85A217E|2862DBEE26E5466C832A4957FA2A11B7|538413089971|200802|000000046304|00000040304|0|0000000000|000006
000|0110000
20080426000000|10000D3|0000|00000000000000000000000000000009|00000000000000000000000000000000|000000000000|000000|000000804234|00000765234|0|0000000000|000039
000|0000000
```

Above example shows PLN-DJBB generate recon file .txt contains transactions of 9 month-bills.

Transaction File by SWITCHING (.ftr)

NO	COLUMN NAME	TYPE	LENGTH	FORMAT	DESCRIPTION	CHECKSUM ROW
1	Date & Time, Local Transaction	n	14	CCYYMMDDhhmmss	Date & Local time when the transaction takes place	CCYYMMDD000000
2	Switcher ID	an	7	zero left-padding	Switcher Identification Code	Switcher ID
3	Merchant Category Code	n	4	zero left-padding	Merchant Category Code	0000 (fixed)
4	PLN Reference Number	an	32		PLN Reference Number	Total number of transaction
5	Switcher Receipt Reference Number	an	32	space right-padding	Switcher Receipt Reference Number	00000000000000000000000000000000 (fixed)
6	Subscriber ID	n	12	space left-padding	Subscriber Identification Code	000000000000 (fixed)
7	Bill Period	n	6	CCYYMM	Bill period of paid bill	000000 (fixed)
8	Transaction Amount	n	12	zero left-padding	Total Amount Payable to PLN TA = RPTAG + RPBK	SUM (Transaction Amount)
9	Total Electricity Bill	n	11	zero left-padding	Amount Payable to PLN RPTAG	SUM(Total Electricity Bill)
10	Incentive / Disincentive	xn	11	Use + instead of D and - instead of C	Amount of electricity bill incentive	SUM(Incentive)
11	Value Added Tax*	n	10	zero left-padding	Reserved use by CA	SUM(Value Added Tax)
12	Penalty Fee	n	9	zero left-padding	Penalty fee for being late RPBK	SUM(Penalty Fee)
13	Bank Code	an	7	zero left-padding	Bank Code (defined by Bank Indonesia)	Bank Code

Example

```
DT|SWITCHERID|MERCHANT|REFNUM|SREFNUM|IDPEL|BL_TH|TRAN_AMOUNT|RP_TAG|RP_INSENTIF|VAT|RP_BK|BANKCODE
20080425200511|10000D3|6015|42F92924B6274C2588F2985DF0B780B4|5BB033B188CD4274A89CF6F9B14FE88D|536310101133|200804|000000136071|00000133071|0|0000000000|000003
000|0110000
20080425200948|10000D3|6015|45FCEE2A507A4E0EA91CCF212280CD9E|DB0ED751615347E8911BCC5E93A35561|536310101117|200804|000000029296|00000026296|0|0000000000|000003
000|0110000
20080425201041|10000D3|6015|243BA35AC14F4FAA8C05BA32BB3CF4E5|AC89C6029C9041199C2063D2860504B8|536310101095|200804|000000168161|00000165161|0|0000000000|000003
000|0110000
20080425201041|10000D3|6015|480CC490241C43BBA5DEF9CCE37F0222|74B16253178E4DF3A5E0079CC714D5D1|536310689165|200804|000000019995|00000016995|0|0000000000|000003
000|0110000
20080425205658|10000D3|6015|42B087D0FA67433395CAF32E6A0BEB96|E2F00DBB97D342B393425431B60827CF|536310250237|200804|000000093975|00000090975|0|0000000000|000003
000|0110000
20080425210430|10000D3|6015|FAB5E05463C94088A9307373A1A2BCA9|3FE2C8C3F0E945F4BF97A7E9226A8834|536310250229|200804|000000031330|00000028330|0|0000000000|000003
000|0110000
20080425211036|10000D3|6015|342FE6E55BF1459FB20FCC52914E4591|658047D187A849FEBC0F5AE9E7FA99CA|538413052348|200802|000000179828|00000173828|0|0000000000|000006
000|0110000
20080425221614|10000D3|6015|95A9B07B06C74730925F8A35EA89A0B9|5BCD4B58435D44169C89809B174BE114|538650954520|200802|000000099274|00000090274|0|0000000000|000009
000|0110000
20080426000000|10000D3|0000|00000000000000000000000000000008|00000000000000000000000000000000|000000000000|000000|000000757930|00000724930|0|0000000000|000033
000|0000000
```

Above example shows SWITCHING generate recon file .ftr contains transactions of 8 month-bills.

Reconciliation File by CA (.rcn)

NO	COLUMN NAME	TYPE	LENGTH	FORMAT	DESCRIPTION	CHECKSUM ROW
1	Reconciliation Result Type	n	1		1 = Force Payment 2 = Cancel Payment	0
2	Date & Time, Local Transaction	n	14	CCYYMMDDhhmmss	Date & Local time when the transaction takes place	CCYYMMDD000000
3	Switcher ID	an	7	zero left-padding	Switcher Identification Code	Switcher ID
4	Merchant Category Code	n	4	zero left-padding	Merchant Category Code	0000 (fixed)
5	PLN Reference Number	an	32		PLN Reference Number	Total number of transaction
6	Switcher Receipt Reference Number	an	32	space right-padding	Switcher Receipt Reference Number	00000000000000000000000000000000 (fixed)
7	Subscriber ID	n	12	space left-padding	Subscriber Identification Code	000000000000 (fixed)
8	Bill Period	n	6	CCYYMM	Bill period of paid bill	000000 (fixed)
9	Transaction Amount	n	12	zero left-padding	Total Amount Payable to PLN TA = RPTAG + RPBK	SUM (Transaction Amount)
10	Total Electricity Bill	n	11	zero left-padding	Amount Payable to PLN RPTAG	SUM(Total Electricity Bill)
11	Incentive / Disincentive	xn	11	Use + instead of D and - instead of C	Amount of electricity bill incentive	SUM(Incentive)
12	Value Added Tax*	n	10	zero left-padding	Reserved use by CA	SUM(Value Added Tax)
13	Penalty Fee	n	9	zero left-padding	Penalty fee for being late RPBK	SUM(Penalty Fee)
14	Bank Code	an	7	zero left-padding	Bank Code (defined by Bank Indonesia)	Bank Code

NOTES

- Fields must be matched are *PLN Reference Number, Switcher Receipt Reference Number, Subscriber ID, Bill Period, Transaction Amount, Total Electricity Bill, Penalty Fee*.

Example

```
FLAG|DT|SWITCHERID|MERCHANT|REFNUM|SREFNUM|IDPEL|BL_TH|TRAN_AMOUNT|RP_TAG|RP_INSENTIF|VAT|RP_BK|BANKCODE
2|20080425230629|10000D3|6015|68CD25ED89D7438DAFD97E29B85A217E|2862DBEE26E5466C832A4957FA2A11B7|538413089971|200802|000000046304|00000040304|0|0000000000|0000
06000|0110000
0|20080426000000|10000D3|0000|00000000000000000000000000000008|00000000000000000000000000000000|000000000000|000000|000000757930|00000724930|0|0000000000|0000
33000|0000000
```

Above example shows CA generate recon file .rcn contains intersection result of two recon files (.txt from PLN-DJBB and .ftr from SWITCHING). It is based on earlier examples of .txt dan .ftr.

Final Reconciliation File by PLN-DJBB (.fcn)

NO	COLUMN NAME	TYPE	LENGTH	FORMAT	DESCRIPTION	CHECKSUM ROW
1	Reconciliation Result Type	n	1		3 = Success for FORCE PAYMENT request 4 = Fail for FORCE PAYMENT request 5 = Success for CANCEL PAYMENT request 6 = Fail for CANCEL PAYMENT request	0
2	Date & Time, Local Transaction	n	14	CCYYMMDDhhmmss	Date & Local time when the transaction takes place	CCYYMMDD000000
3	Switcher ID	an	7	zero left-padding	Switcher Identification Code	Switcher ID
4	Merchant Category Code	n	4	zero left-padding	Merchant Category Code	0000 (fixed)
5	PLN Reference Number	an	32		PLN Reference Number	Total number of transaction
6	Switcher Receipt Reference Number	an	32	space right-padding	Switcher Receipt Reference Number	00000000000000000000000000000000 (fixed)
7	Subscriber ID	n	12	space left-padding	Subscriber Identification Code	000000000000 (fixed)
8	Bill Period	n	6	CCYYMM	Bill period of paid bill	000000 (fixed)
9	Transaction Amount	n	12	zero left-padding	Total Amount Payable to PLN TA = RPTAG + RPBK	SUM (Transaction Amount)
10	Total Electricity Bill	n	11	zero left-padding	Amount Payable to PLN RPTAG	SUM(Total Electricity Bill)
11	Incentive / Disincentive	xn	11	Use + instead of D and - instead of C	Amount of electricity bill incentive	SUM(Incentive)
12	Value Added Tax*	n	10	zero left-padding	Reserved use by CA	SUM(Value Added Tax)
13	Penalty Fee	n	9	zero left-padding	Penalty fee for being late RPBK	SUM(Penalty Fee)
14	Bank Code	an	7	zero left-padding	Bank Code (defined by Bank Indonesia)	Bank Code

Example

```
FLAG|DT|SWITCHERID|MERCHANT|REFNUM|SREFNUM|IDPEL|BL_TH|TRAN_AMOUNT|RP_TAG|RP_INSENTIF|VAT|RP_BK|BANKCODE
5|20080425230629|10000D3|6015|68CD25ED89D7438DAFD97E29B85A217E|2862DBEE26E5466C832A4957FA2A11B7|538413089971|200802|000000046304|00000040304|0|0000000000|0000
06000|0110000
0|20080426000000|10000D3|0000|00000000000000000000000000000008|00000000000000000000000000000000|000000000000|000000|000000757930|00000724930|0|0000000000|0000
33000|0000000
```

Above example shows PLN-DJBB generate recon file .fcn contains processing result (APPROVE or REJECT) to each rows of recon file .rcn sent by CA. PLN-DJBB will check row per row and do manual checking to transaction log which must be provided by SWITCHING accompanying recon file .rcn if there is minimal 1 suspect transaction in .rcn.

ATTACHMENT C
RECONCILIATION CONTROL FILE SPECIFICATION

Specification

All reconciliation control files have same specification as following:

NO	COLUMN NAME	TYPE	LENGTH	FORMAT	DESCRIPTION
1	Total Number of Transaction	n	32	zero left-padding	Total number of transaction (CHECKSUM VALUE OF FIELD PLN REFERENCE NUMBER)
2	Total of Transaction Amount	n	12	zero left-padding	Total Amount Payable to PLN (CHECKSUM VALUE OF FIELD TRANSACTION AMOUNT)

Example

Example of reconciliation control file content:

```
00000000000000000000000000000009|000000804234
```

This content means there is 9 month-bills with total amount of bill Rp. 804.234,00.

ATTACHMENT D
LOG FILE SPECIFICATION

Description

Suspect Transaction Log file:

- Must be provided if there is minimal one suspect transaction in reconciliation file .rcn
- Contains logged message streams were sent to and received from GATEWAY by SWITCHING
- Has filename format AAAAAAA-53501-CCYYMMDD.log

HINT: Primary conditions that a suspect (cancel) transaction can be approved by PLN-DJBB are suspect (cancel) transactions occurs when broken network link and execution of reversal procedures. Suspect (force) transaction should not be occurred in major conditions.

Specification

NO	COLUMN NAME	TYPE	LENGTH	FORMAT	DESCRIPTION
1	Transaction Date-Time	n	14	space right-padding	Transaction Date-Time
2	PLN Reference Number	an	32		PLN Reference Number
3	Subscriber ID	n	12	space left-padding	Subscriber ID
4	Transaction Amount	n	12	zero left-padding	Total Amount Payable to PLN TA = RPTAG + RPBK
5	Message Stream	ans			Logged Message Stream

NOTE: The content must be ordered by Subscriber ID in ascending, then Transaction Date-Time in ascending. Each field is delimited with pipe (|) character.

Example

```
20080407101101|68CD25ED89D7438DAFD97E29B85A217E|530000000001|000000100000|INQUIRY_REQUEST_STREAM
20080407101102|68CD25ED89D7438DAFD97E29B85A217E|530000000001|000000100000|INQUIRY_RESPONSE_STREAM
20080407101200|68CD25ED89D7438DAFD97E29B85A217E|530000000001|000000100000|PAYMENT_REQUEST_STREAM
20080407101220|68CD25ED89D7438DAFD97E29B85A217E|530000000001|000000100000|REVERSAL_REQUEST_STREAM
20080407101240|68CD25ED89D7438DAFD97E29B85A217E|530000000001|000000100000|REVERSAL_REPEAT_REQUEST_STREAM
20080407101300|68CD25ED89D7438DAFD97E29B85A217E|530000000001|000000100000|REVERSAL_REPEAT_REQUEST_STREAM
```

NOTE: INQUIRY_REQUEST_STREAM and others in same field represents the real message stream. Current use is for practical writing reason only.

Above example shows that transaction for Subscriber ID 53000000000001 with amount 100.000 is failed and the SWITCHING sends reversal and two reversal-repeat requests without response from GATEWAY (this condition probably because of broken network link). If there is a suspect (cancel) transaction (in file .rcn) for that Subscriber ID with above transaction logs, the suspect (cancel) transaction will be processed without further verification. Otherwise, manual verification must be taken between PLN-DJBB and SWITCHING.