



STARCOIN C&A System User Manual Volume - II of II

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1 Bank/Merchant Terminal & Terminal Card Handling Process

1.1 Introduction

This section deals with the actual working methodology while dealing with Bank/Merchant Terminal & Terminal Card Handling Process:

- Maintenance of Merchant Information
- Allocation of Terminals to Banks/Merchants & Issue/Replacement of Terminal Cards to the allocated Terminals
- Updating of Card Status of Issued/Replaced Terminal Cards
- Updating of Terminal Service Status & Type of Fault

1.1.1 Purpose

Issue Cards

This task serves any of following purposes:

Issue new Terminal/Terminal Cards to an existing Bank.

Add a new Merchant, allocate Terminal and Issue Terminal Cards.

Allocate new Terminal & Issue Terminal Cards to an existing Merchant.

Replace Cards

This task Replaces an existing Terminal Card.

Update Card Status

This task Updates the status of an existing Terminal Card.

Update Terminal

Updates existing Terminal Service Status Information & fault Type.

Update Merchant

Updates existing Merchant Information.

1.1.2 Prerequisites

- For allocation of Terminal & issue of Terminal Card:
 - For allocation of new Terminal & issuing Terminal Cards to an existing Bank , records should exist for GD Init, System Init, Bank and Terminal Manufacturer.
 - For new Merchant as well as Terminal/Terminal Card entry, records should exist for GD Init, System Init and Terminal Manufacturer.
 - For allocation of new Terminal & issuing Terminal Cards to an existing Merchant , records should exist for GD Init, System Init, Bank, Bank Pool, Merchant and Terminal Manufacturer.
- For Replacement of Terminal Cards, records of Terminal/Terminal Card should exist for Bank / Merchant.
- For Updating of Cards Status, records of Terminal / Terminal Card should exist for Bank / Merchant.
- For Updating of Terminal information, records should exist for Terminal.
- For Updating of Merchant information, records should exist for Merchant.

1.2 Issue Terminal Cards

- **Access path**
Terminal → Setup Merchant/Terminal/Cards

1.2.1 Set up a new Merchant

1.2.1.1 Creating New Merchant Record

- Press 'New' Button of the first block of the initial screen after setting the option for **Merchant Terminal**.
- It will take you to the **Merchant Entry** screen, where you have to enter the following fields:
 - **Merchant Name**
(Characters with maximum length - 30. Mandatory)
 - **Street**
where merchant is located.
(Characters with maximum length - 30. Not mandatory)
 - **City**
where merchant is located.
(Characters with maximum length - 30. Not mandatory)
 - **ZIP Code**
of city where merchant is located.
(Characters with maximum length - 30. Not mandatory)
 - **Country**
where merchant is located.
(Characters with maximum length - 30. Not mandatory)

- **Telephone**
(Characters with maximum length - 30. Not mandatory)
- **Fax**
(Characters with maximum length - 30. Not mandatory)
- **Contact Person**
(Characters with maximum length - 30. Not mandatory)
- If **'OK'** button is pressed , the Merchant record is saved and the control returns back to original calling screen along with **Merchant Id, Merchant name. Merchant Id** is system generated.
- If at any point of time, after making some changes, if **'Clear'** or **'Close'** button is pressed system will ask for a confirmation and will act accordingly.

1.2.1.2 **Allocating a New Terminal**

- Follow the above mentioned **Issue New Terminal / Terminal Card** procedure.

Note: Before Inserting new **Terminal / Terminal Card** for a **Merchant**, user can update **Merchant Details** by pressing **Details** button on first block if **Merchant Terminal** is selected.

1.2.2 **Issue a Terminal / Terminal Card to existing Merchant / Bank**

1.2.2.1 **Retrieve the existing Merchant / Bank record**

- Terminal → Setup Merchant/Terminal/Cards
- Select either **'Bank'** for bank service terminals or **'Merchant'** for merchant terminals.
- Enter either **'Merchant / Bank Id'** or **'Merchant / Bank Name'** fields (searchable fields are in Yellow legend. Wildcarding may be used in both of the fields) to fetch the record.
- Press **'Search'** button in the first block. A list of values will appear from which a Merchant/Bank name can be selected. After selecting a record press **'Ok'** button of the list of values. If you use wildcard or just initials in **'Merchant / Bank Id'** or **'Merchant / Bank Name'** fields and press the **'Search'** button, the list of values appears from which a Merchant/Bank Name can be selected.
- **Terminal & Terminal Card** details for the **Merchant / Bank** will be displayed on the screen.

1.2.2.2 **Issue New Terminal / Terminal Card**

Allows to enter all relevant data to set up a terminal as well as the related terminal card.

- Press '**New**' button on the **Terminal** Block of the screen.
- You get a new screen for entering **Terminal** as well as **Terminal Card** details.
- **Terminal** section:
 - **For Bank Terminal**
 - **Operator Id**
System specific identifier for the terminal operator (here: bank)
 - **Cluster Id**
For Bank service terminals, only the id for 'BST' or 'SST' can be selected.
 - **Terminal Id**
Terminal serial number for that bank/merchant, defined by the C&A system.
 - **Terminal Manufacturer No.**
Identifier for the terminal manufacturer, defined by the C&A system.
Enter a valid data or press '**Search**' button and select a valid data from list of values.
 - **Terminal Category**
The terminal is either a 'BANK' terminal.
 - **Terminal Service Status**
Terminals can be
ACTIVE Terminal is in operational mode
UNDER REPAIR Terminal currently out of service
SHUTDOWN Terminal not used anymore
The 'Terminal Service Status' can be set via Terminal → Update Terminals.
 - **Bank Terminal Id**
Specific identifier of a bank terminal, defined by the C&A system.
 - **Loaded Terminal SW Version**
Giving the software version which is actually loaded into that terminal.
(Number. Maximum length 4. Not mandatory)
 - **Last Fault Type**
Last fault which occurred on that terminal.
(Number. Maximum length 2. Not mandatory)
 - **Terminal Location**
C&A specific identifier of terminal location.
(Characters with maximum length - 30. Not mandatory)
 - **Terminal Model Type**
Identifier for the hardware type of the terminal, e.g. ICT "800".
(Characters with maximum length - 30. Not mandatory)
 - **Type of Data Transfer**
Enter '01' for via Transfer Card/Transfer Laptop and '05' for on-line transfer.
Mandatory.
 - **Topical SW Version**
Identifier of the actual software version (may be different to 'Loaded Terminal SW version')
(Number. Maximum length 4. Not mandatory)

- **Bank Specific Terminal Id**
This value is personalised on the terminal card and can be used by the bank to identify the terminal, because it also appears in the settlement data.
(Characters with maximum length - 8. Mandatory)
- **Red List Length**
Defining the maximum redlist length for a terminal. Defined value for the ICT 800 is currently 4090 - do not change!
(Number. Maximum length 8. Mandatory)
- **For Merchant Terminal:**
 - **Operator Id**
System specific identifier for the terminal operator (here: merchant)
 - **Cluster Id**
The Cluster Id can be defined by the C&A system provider to assign a terminal to a certain group. For merchant terminals this field allows to define groups of merchants (terminals) e.g. according to ISO 8583 - Annex A.2, where numbers for various businesses are defined.
Please note, that '6010' is reserved for BST and '6011' for SST!
(Number. Maximum length 4. Mandatory field)
 - **Terminal Id**
Terminal serial number for that bank/merchant, defined by the C&A system.
 - **Terminal Manufacturer No.**
Identifier for the terminal manufacturer, defined by the C&A system.
Enter valid data or press '**Search**' button and select a valid data from list of values.
 - **Terminal Category**
The terminal is 'MERCHANT' terminal.
 - **Terminal Service Status**
Terminals can be
ACTIVE Terminal is in operational mode
UNDER REPAIR Terminal currently out of service
SHUTDOWN Terminal not used anymore
The 'Terminal Service Status' can be set via Terminal → Update Terminals.
 - **Merchant Bank Id**
Identifier of the bank, the merchant has the account for this terminal.
Enter valid data or press '**Search**' button and select a valid data from list of values.
 - **Merchant Bank A/c No.**
Account number, where the transactions for this terminal are settled.
Please note, that the accounts are terminal related, thus one merchant may have different accounts for different (groups of) terminals at one bank.
Enter valid data or press '**Search**' button and select a valid data from list of values.
 - **Loaded Terminal SW Version**
Giving the software version which is actually loaded into that terminal.
(Number. Maximum length 4. Not mandatory)

- **Last Fault Type**
Last fault which occurred on that terminal.
(Number. Maximum length 2. Not mandatory)
 - **Terminal Location**
C&A specific identifier of terminal location.
(Characters with maximum length - 30. Not mandatory)
 - **Terminal Model Type**
Identifier for the hardware type of the terminal, e.g. "ICT 800".
(Characters with maximum length - 30. Not mandatory)
 - **Type of Data Transfer**
Enter '01' for via Transfer Card/Transfer Laptop and '05' for on-line transfer.
Mandatory.
 - **Topical SW Version**
Identifier of the actual software version (may be different to 'Loaded Terminal SW version')
(Number. Maximum length 4. Not mandatory)
 - **Merchant Specific Terminal Id**
This value is personalised on the terminal card and can be used by the merchant to identify the terminal, because it also appears in the settlement data.
(Characters with maximum length - 8. Mandatory)
 - **Red List Length**
Defining the maximum redlist length for a terminal. Defined value for the ICT 800 is currently 4090 - do not change!
(Number. Maximum length 8. Mandatory)
- **Terminal Card** section:
 - **Service**
Identifier which payment functionality is supported by the terminal card

PSAM_V2	IEP/ECH/POS purchases
BSTSAM_V2	IEP/ECH/POS bank terminal functions
PSAMIEP	IEP/ECH purchases
BSTIEP	IEP/ECH bank terminal functions
BSTPOS	POS bank terminal functions
 - **Terminal Card Number**
Serial number of the terminal card (PSAM), defined by the C&A system.
 - **Expiry Date**
Terminal card (PSAM) date of expiry, as defined in the system initialisation
(System → Setup → System Init → TK Param.).
 - **Single Tx Prob.**
Terminal parameter defining the probability of single transaction recording of IEP purchase transactions (hex coded: 00 = 0%...FF = 100%).
It is recommended to use the default value 'FF'. If this parameter is not equal FF and '**Single Tx Limit**' is above '0', the accounting for IEP transactions is deactivated and can not be enabled again.
 - **Status**
Operational state of the terminal card. For a detailed description of the terminal card states, please refer to a later chapter of this manual.

- **Threshold value**
If the purchase amount on a terminal is above this value, the terminal will promote Debit-POS as preferred payment method, but still allows to change for an IEP or ECH payment.
Defined in the system initialisation (System → Setup → System Init → TK Param.).
 - **Currency code**
Currency code of the payment system.
 - **Floor Limit of TK**
Maximum limit of the terminal card (ISO401) for Debit-POS payments.
(Number. Maximum value 4294967295. Mandatory).
 - **Balance indicator**
Defines when the balance of the IEP and/or ECH is displayed. Defined in System → Setup → System Init.
 - **Single Tx Limit**
If the IEP purchase amount on a terminal is above this value, the terminal will store a single tx record for this IEP transaction.
If this parameter is not equal '0' and '**Single Tx Prob**' is below 'FF', the accounting for IEP transactions is deactivated and can not be enabled again.
- Press '**OK**' button to come back to the original calling screen after inserting a new **Terminal** and **Terminal Card**.
 - If at any point of time , after making some changes, if '**Clear**' or '**Close**' button is pressed system will ask for a confirmation and will act accordingly.

1.2.2.3 **Enter some more Terminal / Terminal Card:**

- Press '**New**' button in the **Terminal** block which will take you to the same screen where you can enter one new **Terminal / Terminal Card** details.

1.2.2.4 **Issue the existing new Terminal Card:**

- Press the button right in the '**Terminal Card**' section of the terminal card you want to personalise and the '**Issue**' button is activated. The status of the terminal card to be personalised must always be 'NEW', otherwise the card has already been personalised.
- Press '**Issue**' button to invoke a new screen displaying
 - Merchant/Bank Name
 - Operator Id
 - Term. Id
 - Cluster Id
 - PSAM
 - Card Type
 - Pilot Id
- Enter values for

- Version : The version number '001' or the last here entered value appears on the screen. This version number must be same as the PCT file version of the actual PCT file!
-

- **A PCT file (Personalisation Control Table) defines the personalisation structure for a card. Please assure always to use the right version. If the PCT file is updated, a new version will be provided by G&D. Please make sure to delete the old version, to avoid misuse or accidental usage.**
-

- PCT/Log Directory Name
- The PCT **File Name** will appear automatically. To work with an encrypted PCT file, click on the **'Use Encrypted File'** check box.
- Press **'Personalise'** button to personalise and issue terminal cards. The data is stored in the card inserted.

A Personalisation log file is generated in the PCT directory of the client named **<PSAM No. (in Hex).LOG>**.

1.2.2.5 **View or modify Merchant / Terminal / Terminal Card Data**

In the details screens you can modify the following fields prior to issue of Terminal Card. After personalisation, only the merchant information fields can be changed!

- For Merchant Information
Press **'Details'** in the merchant/bank section.
- For Terminal and Terminal Card
Press **'Details'** in the terminal section.

1.2.2.6 **Issue Transfer cards**

Transfer cards must be personalised to receive the correct authentication key for the related terminal and banks.

-
- Please note: A transfer card can be used at any bank, but only at the terminals of one specific merchant (same Operator Id).
-
- Select the terminal and the terminal card a Transfer Card shall be issued for.
 - Press **'Issue Transfer Card'** to personalise and issue transfer card to Merchants.

1.2.3 Replace Terminal Card

- **Access path**
Terminal → Replace Cards

1.2.3.1 Retrieve Existing Terminal Record

- Enter either '**Merchant / Bank Id**' or '**Merchant / Bank Name**' fields (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields) to fetch the record.
- Press '**Search**' button in the first block. A List of Values will appear from which a Merchant/Bank Name can be selected. After selecting a record press '**Ok**' button of the List of Values. If you use wildcard or just initials in '**Merchant / Bank Id**' or '**Merchant / Bank Name**' fields and press the '**Search**' button, the List of values appears from which a Merchant/Bank Name can be selected.
- **Terminal & Terminal Card** details for the **Merchant / Bank** will be displayed on the screen.

1.2.3.2 Replace Terminal Card

The table below shows the combination of conditions for which the terminal card can be replaced.

Sl#	Status Reason	List Status	Card Status	Replace	Remarks
1	Alert	Red Listed	DEACTIVATED	N	If Status Reason is 'Alert' this is the only possible combination
4	Defect	Neither	RESTRICTED USE	Y	If a defective card is not Red Listed, then it can be replaced.
		Red Listed	RESTRICTED USE	N	
5	Lost/Stolen	Neither	RESTRICTED USE	Y	If a Lost/Stolen card is not red listed it can be replaced.
		Red Listed	RESTRICTED USE	N	
6	Returned	Neither	RESTRICTED USE	N	A card is returned to the C&A system only when the customer decides not to use the card anymore. Hence it cannot be replaced.
		Red Listed	RESTRICTED USE	N	
7	C&A Supervisor	Neither	RESTRICTED USE	Y	The C&A system may set the card to restricted use to restrict further load/unload with the card
		Red Listed	RESTRICTED USE	N	

			USE		
8	Replacement	Neither	RESTRICTED USE	Y	This status cannot be updated manually. These values are automatically set on the Expiry date of the card. This card can be replaced.
			DEACTIVATED	Y	On the deactivation date (expiry date + offset), the card is automatically deactivated. This card can be replaced. Expired cards cannot be redlisted.

Table 1-1 Terminal card Replacement criteria

- Select a **Terminal Card** record. If the **Card Status** is 'RESTRICTED USE' or 'DEACTIVATED' and the **Card's Status Reason** is not 'ALERT', and List Status is not 'Red Listed', '**Replace**' button is enabled, i.e. the card is replaceable.
- Press '**Replace**' button. A warning message pops up asking for user's confirmation for replacement.
 - If '**Yes**' button is chosen, the existing card will be replaced by a new one having the card's status as **New**. '**Replace**' button is however disabled as the newly replaced card is selected and the '**Issue**' button is enabled. A message will pop up stating the completion of replacement.
 - If '**No**' button is opted for the selected card's status remains unchanged and the replacement process is abandoned.
- To issue the replaced card, press '**Issue**' button to invoke a new screen containing
 - Merchant/Bank Name
 - Operator Id
 - Term. Id
 - Cluster Id
 - PSAM
 - Card Type
- Enter values for
 - Version : The version number 001 or the last here entered value appears on the screen. This version number should be same as the PCT version.
- The **File Name** will appear automatically. To use an encrypted PCT file, click on the **Use Encrypted File** check box.
- **Either**
 - Press '**Personalise**' button to personalise and issue cards. The data is stored in the card inserted. A Personalisation log file is generated in the PCT directory of the client named <**PSAM No. (in Hex).LOG**>.
- **Or**
 - Press '**Cancel**' button to return to the previous screen.

1.2.4 Update a Terminal Card Status

- **Access path**
Terminal → Update Card Status

The Terminal card , through its life-cycle can go through 5 different states, from the time it is set-up in the C&A database till it expires. These states are maintained as Card Status. Depending on the Card Status, certain functionalities of the card are either allowed or disallowed.

NEW

- **Set:** Automatically when the terminal card data have been entered and set up by the system ready for Personalisation.

Restrictions:

Transaction	Allowed	Denied
Load		x
Unload		x
PIN cntr. reset		x
Payment		x

Table 1-2 Restrictions on Terminal Card Status NEW

It should not be possible, that any transaction arrive. If yes, the C&A supervisor need to be informed, because it may be a faked terminal card or transaction.

ACTIVE

- **Set:** Automatically, when the Personalisation instance has returned a correct response.

The terminal card can operate now in the STARCOIN payment system able to execute load, unload, payment and service (PIN counter reset) transactions.

Restrictions:

Transaction	Allowed	Denied
Load	x	
Unload	x	
PIN cntr. reset	x	
Payment	x	

Table 1-3 Restrictions on Terminal card Status ACTIVE

RESTRICTED USE

- **Set:** Automatically, when authorised user on request of the service technician/merchant/bank (phone call/fax/..) selects one of the below mentioned reasons.
- **Set:** Automatically by the C&A system, when terminal card expires.

Restrictions:

Transaction	Allowed	Denied
Load		x
Unload		x
PIN cntr. reset		x
Payment	x	

Table 1-4 Restrictions on Terminal Card Status RESTRICTED USE

'Payment' is still allowed because especially due to the off-line purchase terminals and irregular reconciliation, purchase transactions may arrive for a certain amount of time after the expiry of the terminal card.

On the date of expiry of the terminal card of the purchase terminals, further purchase transactions are automatically blocked by the terminal. However transfer of data for purchases done before the expiry of the card can still be done. These transferred data are accepted by the C&A system. During settlement, only the files received until the deactivation offset days from expiry are settled. Other transactions are recorded as critical and are not settled. In the current implementation, settlement of critical transactions are not possible.

Please note: There is no automatic process generating a new generation of terminal cards after its expiry, initiated by this state itself ! The process of generating a new cards is triggered from another screen/table and may use the card status field to decide about replacing this card by a new one.

DEACTIVATED

- **Set:** Automatically after the deactivation offset days from expiry.
- **Set:** Automatically, if reason 'Alert' is selected.

The card had been in state 'Restricted use' with reason as 'Replaced' until deactivation offset days from expiry. No transactions are expected to arrive for clearing anymore.

Restrictions:

Transaction	Allowed	Denied
Load		x
Unload		x
PIN cntr. reset		x
Payment		x

Table 1-5 Restrictions on Terminal Card Status DEACTIVATED

No transaction requests can be accepted anymore. The service provider must have informed the merchants about the time after card 'RESTRICTED USE' / 'REPLACEMENT' until it becomes useless.

If any tx arrive, it may be important to receive the place of load/unload/payment as soon as possible to get hold of the fraud.

Please note: There is no automatic deletion of 'DEACTIVATED' cards. This command must be executed manually or by SQL-statements.

SUMMARY

Card state overview:

Reason Status	NULL	C&A superv.	Re- turned	Lost/ Stolen	Defect	Re- placed	Alert
NEW	x						
ACTIVE	x						
RESTRICTED		x (R)	x (R)	x (R)	x (R)	x (R)	
DEACTIVATED		x (R)	x (R)	x (R)	x (R)	x (R)	R

Table 1-6 Card status Overview

Please note: As to be seen in the table above card state is set by a certain process (data entry - 'NEW', Personalisation - 'ACTIVE') or manually by an authorised user. The respective list states is set accordingly by the C&A system or can be set manually.

Coding of list status

- (R) Red listed at the discretion of the system provider (manually)
- R Red listed automatically

Status reason summary

- *Alert:*
Terminal card is suspected/known to be faked or able to corrupt the system in any way.
- *C&A supervisor:*
The C&A supervisor may set a card to certain state if it seems necessary from security or system point of view (e.g. card suspected to be faked).
- *Defect:*
The merchant reports a defect of his card to the service provider, who informs the C&A system and sends the card there for testing.
- *Lost/Stolen:*
The merchant reports a loss or theft of his card to the service provider, who must inform the C&A system at once. If available the date/time of loss theft need to be reported too.
- *Replacement:*
The terminal card has expired and is replaced in the normal card live cycle. The process of generating a new set of cards is initiated from an extra screen.
- *Returned:*
The merchant returns his card to the service provider for any reason and the bank must inform the C&A system (phone/fax/letter).

1.2.4.1 Retrieve the Existing Terminal Record

- Enter either ‘**Merchant / Bank Id**’ or ‘**Merchant / Bank Name**’ fields (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields) to fetch the record.
- Press ‘**Search**’ button in the first block. A List of Values will appear from which a Merchant/Bank Name can be selected. After selecting a record press ‘**Ok**’ button of the List of Values. If you use wildcard or just initials in ‘**Merchant / Bank Id**’ or ‘**Merchant / Bank Name**’ fields and press the ‘**Search**’ button, the List of values appears from which a Merchant/Bank Name can be selected.
- **Terminal & Terminal Card** details for the **Merchant / Bank** will be displayed on the screen.

1.2.4.2 Update Card Status

A terminal card may go through different states during its life-cycle. Each state leads to the change of card status. Figure below shows the state transitions during the life-cycle of a terminal card:

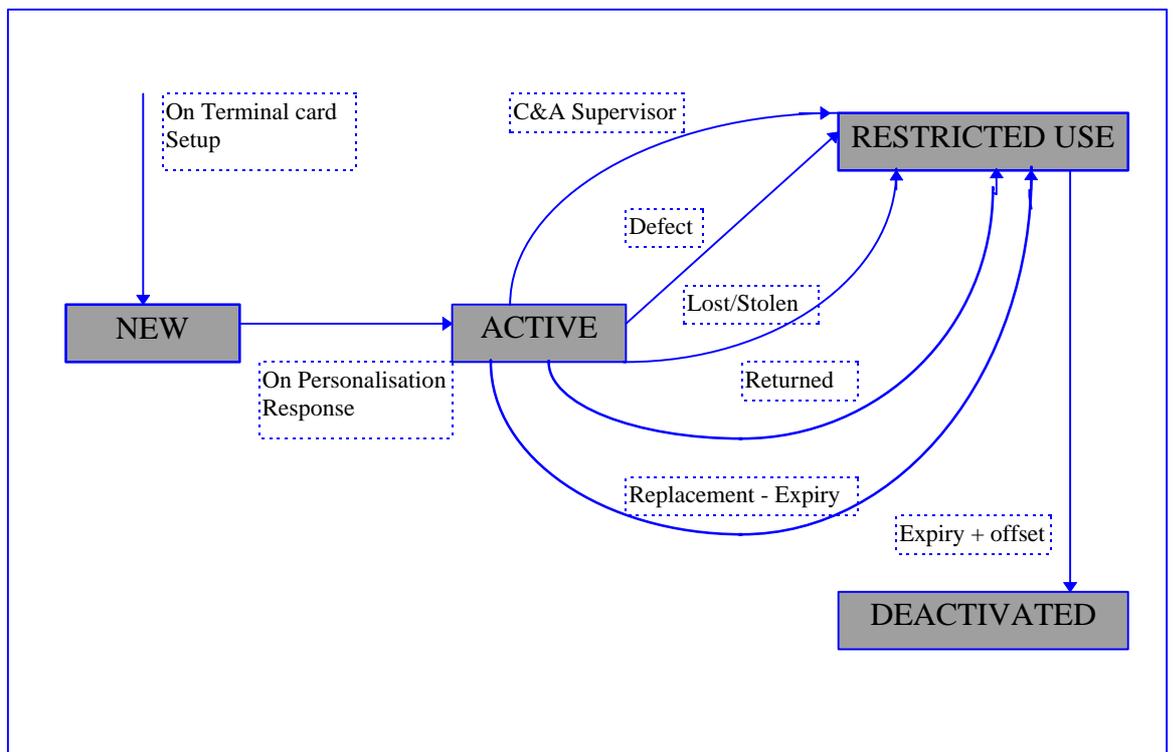


Figure 1-1 State transition for Terminal Card Status

- Select a **Terminal Card**. If the **Card's Status** is 'ACTIVE', '**Update**' button is enabled. On pressing of update button, a pop up window appears containing card's
 - **Status**
Card status will be displayed e.g. RESTRICTED USE, DEACTIVATED etc.
 - **Status Reason**
List Box showing the possible status reasons. e.g. Defect, Alert, Bank Request etc.
 - **List Status**
List Box having two possible options i.e. Neither and Red Listed
 - **Status Date**
When was the terminal card set to this status.

Once the **Status Reason / List Status** is selected card's status is automatically set. **Status Date** is set to current date.

- On pressing of '**OK**' button in that pop up window, the selected Card's status information is modified, and the pop up window disappears. In the initial screen cursor is set to the selected Card showing the modified status information.
- If '**Cancel**' button is pressed, pop up window disappears without any modification done.

Note:

If '**Clear**' button is pressed whenever possible, all the information appeared will be lost and the screen will be initialised.

1.2.5 **Update Terminals**

- **Access path**
Terminal → Update Terminals

1.2.5.1 **Retrieve the existing Terminal record**

On selection of this option from the menu item, the corresponding form appears on the screen with the cursor positioned on 'Operator Id' field, and 'Bank terminal' radio button on.

- Select either '**Bank Terminal**' or '**Merchant Terminal**'
- **Either**
Enter a valid 'Operator id' and press 'Tab' to fetch the record on the screen.
- **OR**
 - Put the cursor on '**Operator Id**', at this stage '**Search**' button is on.
 - Press the '**Search**' button, a list of terminals will be displayed.
 - Select a terminal and press '**OK**' button.
 - The desired record is fetched onto the screen.

1.2.5.2 Update Terminal record

- Update the open fields as required.
- Press 'Save' button to save the changes in the database.

Note: If after data retrieval some change is made and 'Clear' or 'Close' button is pressed, the system will raise an alert for confirmation and will act accordingly. Otherwise pressing of 'Clear' or 'Close' button without any change made will clear or close the screen respectively.

1.3 Update/Delete Merchants

- **Access path**
Terminal → Update Merchants

1.3.1 Update Merchant Information

Retrieve Existing Merchant Record

- **Either**

Enter a valid **Merchant Id** and press 'Tab' to fetch the record on the screen.

- **OR**

- Put the cursor on '**Merchant Id**', or '**Merchant Name**'. At this stage '**Search**' button is on.
- Press the '**Search**' button. A List of Values containing the list of **Merchants** will be displayed. Wildcarding is possible.
- Select a **Merchant** record and press '**OK**' button in the List of values.
- The desired record is fetched onto the screen.

1.3.2 Update Merchant Record

- The following fields can be modified:
 - **Street**
(Characters with maximum length - 30. Not mandatory)
 - **City**
(Characters with maximum length - 30. Not mandatory)
 - **ZIP Code**
(Characters with maximum length - 30. Not mandatory)
 - **Country**
(Characters with maximum length - 30. Not mandatory)
 - **Telephone**
(Characters with maximum length - 30. Not mandatory)
 - **Fax**
(Characters with maximum length - 30. Not mandatory)
 - **Contact Person**
(Characters with maximum length - 30. Not mandatory)
- Press '**Save**' button to save the changes.
- Press '**Close**' button to come out from that screen.

Note: If after data retrieval some change is made and **'Clear'** or **'Close'** button is pressed, the system will raise an alert for confirmation and will act accordingly. Otherwise pressing of **'Clear'** or **'Close'** button without any change made will clear or close the screen respectively without asking for any confirmation.

1.3.3 **Delete Merchant**

1.3.3.1 **Retrieve the Existing Merchant Record**

- **Either**

Enter a valid **Merchant Id** and press 'Tab' to fetch the record on the screen.

- **OR**

- Put the cursor on **'Merchant Id'**, or **'Merchant Name'**. At this stage **'Search'** button is on.
- Press the **'Search'** button, a List of Values containing the list of **Merchants** will be displayed. Wildcarding is possible.
- Select a **Merchant** record and press **'OK'** button.
- The desired record is fetched onto the screen.

1.3.3.2 **Delete Merchant Record**

- Check the **'Deleted'** check box to delete a particular **Merchant**.
- Press **'Save'** button.

Note: If at any point of time, after making some changes **'Clear'** or **'Close'** button is pressed system will ask for a confirmation and will act accordingly.

2 Personalisation Process

2.1 Introduction

This section deals with the followings :

1. Batch Export of Customer Card Data

Once the customer cards are set up via 'Customer Card Handling Process', they need to be personalised before being 'ACTIVE'. As a first step to that the card data to be exported in a specified file format from which they will be actually personalised in a subsequent stage.

2. Import Customer Card Data

After the customer card(s) have successfully been personalised, a confirmation record is generated by the Personalisation program, which must be returned to the C&A System and read by the STARCOIN application to change the card status from 'NEW' to 'ACTIVE'. From this very moment the card can be used.

2.2 Export Customer Card data

- **Access path**

Export → Export Personalisation Data

2.2.1 Prerequisites

- For exporting Card Data record(s) should present in the following tables :
 1. All the System and G&D Initialisation tables.
 2. Bank, Customer, Customer Card, IEPECH tables.

2.2.2 Export of personalisation data

- Choose the option from 'Card Issuing Bank' block. Valid values are 'Single' and 'All'.
- For 'Single' Bank option get bank information either by providing valid 'Bank Id' or via list of values (through 'Search' button)
- For 'All' bank option all the bank information (for which card(s) are yet to be exported) will be fetched on the screen. User can scroll through 'Previous' and 'Next' buttons.
- Choose Card type. Valid values are 'IEPPOS', 'ECHPOS', 'IEPECHPOS' and 'All'.
- Depending on the card type selected, Card details will be populated. Also the PCT files required for personalisation will appear depending on the card type selected.
- The version for the PCT file(s) is updateable. Default value is '001' or the last here entered value. This field must contain the version number of the current PCT file in use.

-
- **A PCT file (Personalisation Control Table) defines the personalisation structure for a card. Please assure always to use the right version. If the PCT file is updated, a new version will be provided by G&D. Please make sure to delete the old version, to avoid misuse or accidental usage.**
-

- In case PCT files are encrypted, the 'Encrypted' field can be set.
- If 'Export' button is pressed, a confirmation message will appear stating that the card data are going to be exported.
- On positive response to the confirmation, a popup window will appear with the following fields :
 1. **Card Number Currently in Progress**
Shows the Card Number which currently is being processed.
 2. **Processing Logfile Name**
Shows the file name (along with path) where all the operation history are kept.
 3. **Process**
In case of successful operation the field shows the corresponding information. Otherwise the error will appear in this field.
 4. A progress bar, giving pictorial representation of the progress of export process.
 5. If 'Start' button is pressed, the actual export process will start. Once the process is complete, the user can view / print the process history via 'View Log' button.
- Once the export process is complete, the popup window disappears and the modified card information (after export process) will be fetched.
- If 'Clear' button is pressed, a confirmation message will appear (in case any change is made to the screen e.g. any record is fetched, otherwise the screen will be cleared without any message). On positive response the screen will be cleared.
- If 'Close' button is pressed, a confirmation message will appear (in case any change is made to the screen e.g. any record is fetched, otherwise the screen will be closed without any message). On positive response the screen will be closed.

2.3 Import Customer Card Personalisation confirmation file

- **Access path**
Import → Personalisation Confirmation

2.3.1 Prerequisites

- The confirmation file must exist in the correct directory, as defined in STARCOIN.ini. (DATA_FILE_DIR=<path>)

2.3.2 Import confirmation file

- Enter Confirmation date.
- **Either**
Press '**Import**' button to import Personalisation data for customer card data.
- **Or**
Press '**Close**' button to return to main menu.

Note: At any point of time, you can press the '**Clear**', button to clear the screen.

On successful import a screen shows the number of imported and rejected confirmations:

- **Number of successful Confirmations:**
These cards have been successfully personalised and set to state 'ACTIVE'

- **Number of erroneous Confirmations:**
The card could not be personalised for technical reasons. In this case the Personalisation machine rejects the card and tries to personalise the data on the next card in the stack. This number gives an information how many cards have been rejected, but the Personalisation nevertheless was executed on another card.
 - **Number of redundant Confirmations rejected:**
For these cards a Personalisation confirmation was already successfully done and the cards have been personalised a second time. Check the personalised cards on double issued ones and delete one of them.
-
- If double cards are existing in one payment system the consistency of the database and especially the payment data is destroyed. This is always an indicator for the existence of counterfeit cards!
-

3 Settlement Process

3.1 Introduction

Settlement process involves

- Generation of debit advice for on-line customer transactions such as
 - ‘Load customer card from cash/account’ and
 - ‘Unload customer card to cash/account’
- Generation of settlement advice for IEP/ECH/POS off-line purchase transactions.
- Generation of settlement advice for POS on-line purchase transactions.
- Export of settlement data to be sent to settlement bank, which may be hashed and encrypted

Settlement can be generated manually using the screen menu Settlement → Debit Advice/Settlement Advice or automatically through the off-line process CBSERVER /t and the setting for automated mode in System → Setup → System Init → Settlement Bank.

Figure below depicts the Manual and automatic process of settlement.

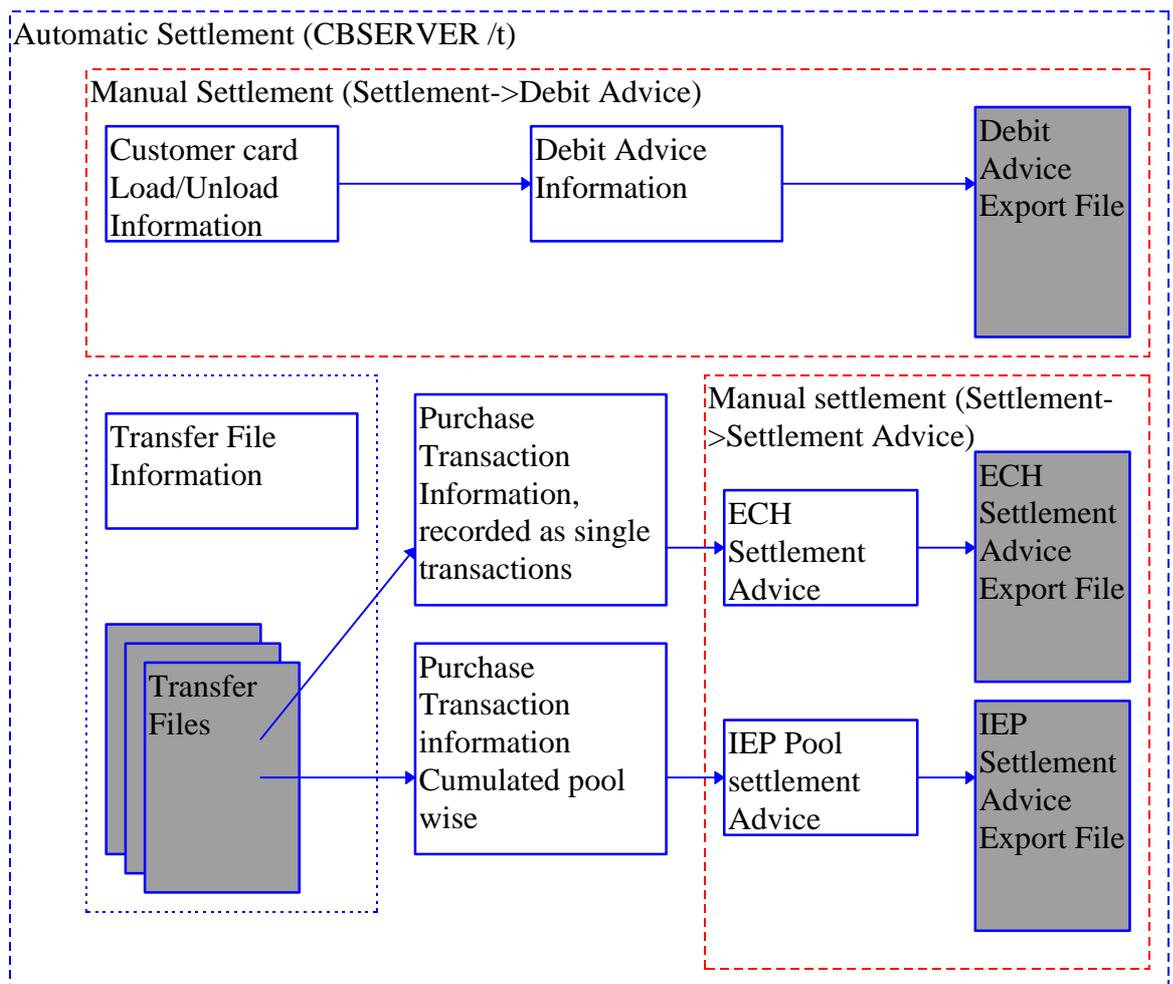


Figure 3-1 Settlement Process

The settlement process generates settlement advice for both the transaction amount and the service charge amount. The table below depicts the source and destination of the settlement advice for different transactions.

• IEP Load from account	
Credit	Debit
Bank Pool Account <i>Load Amount</i>	Customer Bank Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	Customer Bank Service Charge account <i>Service Charge</i>
• IEP Load from Cash	
Credit	Debit
Bank Pool Account <i>Load Amount</i>	BAC Card Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	BAC Bank service Charge account <i>Service Charge</i>
• IEP Unload to account	
Credit	Debit
Customer Bank Account <i>Load Amount</i>	Bank Pool Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	Customer Bank service Charge account <i>Service Charge</i>
• IEP Unload to Cash	
Credit	Debit
BST Bank cash Account <i>Load Amount</i>	Bank Pool Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	BST Bank service Charge account <i>Service Charge</i>
• ECH Load from account.	
Credit	Debit
ECH Account <i>Load Amount</i>	Customer Bank Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	Customer Bank Service Charge Account <i>Service Charge</i>
• ECH Load from Cash	
Credit	Debit
ECH Account <i>Load Amount</i>	BAC Bank Cash Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	BAC Bank Service Charge Account <i>Service Charge</i>

• ECH Unload to account	
Credit	Debit
Customer Bank Account <i>Load Amount</i>	ECH Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	Customer Bank Service Charge Account <i>Service Charge</i>
• ECH Unload to Cash	
Credit	Debit
BST Bank cash Account <i>Load Amount</i>	ECH Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	BST Bank Service Charge Account <i>Service Charge</i>
• IEP Purchase	
Credit	Debit
Merchant Bank Account <i>Load Amount</i>	IEP Pool Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	Merchant Bank Service Charge Account <i>Service Charge</i>
• ECH Purchase	
Credit	Debit
Merchant Bank Account <i>Load Amount</i>	ECH Account <i>Load Amount</i>
C&A System provider Service account <i>Service Charge</i>	Merchant Bank Service Charge Account <i>Service Charge</i>

Table 3-1 Source and Destination for Settlement

Note : There is an additional settlement feature for Debit POS transactions. As far as the settlement of such transactions are concerned it is exactly similar to that of a ECH Purchase transaction.

3.1.1 Prerequisites

- For Debit Advice: Load/unload transaction must have been executed
 - For Settlement Advice: IEP/ECH purchases must have been transferred to the C&A System.
-
- Please note:
Before the settlement advice can be generated, the transfer data must have been read to the database. This happens daily at the time defined in System -> Set-up -> System Init. -> Settlement Bank 'Settlement Time'. The correctness of the transfer data can be checked in the log-file directory in file Of<date>.dat, while <date> is the actual system date.
-

3.2 Generate Debit Advice (for Load/Unload Tx)

- **Access Path**
Settlement → Debit Advice

3.2.1.1 Retrieve Existing Customer Transaction Records

- Select either the 'Single Customer' or 'All Customer' option.
- For '**All Customer**'
 - Customers who have confirmed transactions for which debit advice has not been raised is shown with the following information:
 - Bank Id
 - Bank Customer Id
 - Bank A/c No.
 - Customer Name
 - Bank Name
 - Bank BIN
 - Total Load Amount
 - Total Unload Amount
 - For each **Customer Information** retrieved, **Customer Transactions Details** made by that customer are shown on the screen, showing the following fields:
 - Date
 - No.
 - Type
 - Reason
 - Context
 - Card No.
 - IEP/ECH No.
 - Amount
 - The '**Search**' and '**Export**' buttons are disabled. The '**Details**', '**Next**' (disabled when at last record), '**Prev**' (disabled when at first record) and '**Advice**' buttons are enabled.
 - At this point of time you can see the details of a particular customer by pressing the '**Details**' button.
 - You can navigate between various records of customer and their corresponding transactions by pressing the '**Prev**' and '**Next**' buttons.
- For '**Single Customer**'
 - **Either**
Enter valid **Bank Id** and **Bank Customer Id** fields or enter valid **Bank Id** and **Bank A/c No.**
Press '**Tab**'. Data is retrieved for that particular Customer.
 - **Or**
 - Press the '**Search**' button (Searchable fields are in Yellow legend. Wildcarding may be used in the field). Press '**Ok**' in the List of Values after choosing any particular customer. Data is retrieved for that particular Customer. **Customer**

Name, Bank Name, Bank BIN, Total Load Amount, Total Unload Amount are display only fields.

- The **‘Search’** and **‘Export’** buttons are disabled. The **‘Details’** and **‘Advice’** buttons are enabled.
- At this point of time you can see the details of the particular customer by pressing the **‘Details’** button.
- At this point, pressing **‘Clear’** button will clear the form without raising Debit advice..
- At this point, pressing **‘Close’** button will close the form without raising Debit advice..

3.2.1.2 Raise Debit Advice

- Press **‘Advice’** button. For **‘Single Customer’** Debit advice is raised and the customer transaction is updated by the Debit Advice No. for that particular customer. For **‘All Customers’** Debit advice is raised and the customer transactions are updated by the Debit Advice No. for all customers.
- The **‘Details’** and **‘Advice’** buttons are disabled and **‘Export’** button is enabled.
- At this point, pressing **‘Clear’** button will clear the form without exporting the data to a flat file.
- At this point, pressing **‘Close’** button will close the form without exporting the data to a flat file.

Note: It will not be possible to export the data from this screen for the particular record, because data for this customer will not be retrieved in this form again.

3.2.1.3 Export Debit Advice

- Press **‘Export’** button. The debit advice raised is exported to a flat file **DAVDDMMY.dat**. in the export directory of the STARCOIN Server as defined in STARCOIN.ini (SETTLEMENT_EXPORT_DIR=<path>). The entire data from the debit advice table is dumped in the file.

3.3 Settlement Advice

- **Access Path** |
Settlement → Settlement Advice

-
- Please note:
Before the settlement advice can be generated, the transfer data must have been read to the database. This happens daily at the time defined in System -> Set-up -> System Init. -> Settlement Bank 'Settlement Time'. The correctness of the transfer data can be checked in the log-file directory in file Of<date>.dat, while <date> is the actual system date.
-

3.3.1.1 Retrieve Existing Purchase Transaction Records

- Select either the **‘Single Merchant’** or **‘All Merchants’** option.
- For **‘All Merchants’**

- **Either**
 - Enter valid '**Transfer Date**'
- **Or**
 - Press the '**Search**' button (Searchable fields are in Yellow legend. Wildcarding may be used in the field). Press '**Ok**' in the List of Values after choosing any particular transfer date.
- Merchants who have uploaded purchase transactions for which Settlement Advice has not been raised is shown with the following information:
 - Merchant Id
 - Merchant Name
 - Transfer Date
 - Settlement Amount
- For each **Merchant Information** retrieved, **Merchant A/c Transactions Details** shown on the screen, showing the following fields:
 - Merchant Bank Id
 - Account No.
 - Amount
 - Service Charge
- For each **Merchant A/c Transactions Details** retrieved, **Terminal Transactions Details** are shown on the screen displaying the following fields:
 - Terminal Id
 - Cluster Id
 - Card Acceptor Id
- Amount
- For each Terminal Transactions Details retrieved, Terminal Card Transaction Details are shown on the screen displaying the following fields:
 - Terminal Card No.
 - Amount
- For each **Terminal Card Transactions Details** retrieved, **Pool Transaction Details** are shown on the screen displaying the following fields:
 - Pool Id
 - Amount
- Click '**ECH Tx.**' to view **ECH Transaction Details**. For each **Terminal Card Transactions Details** retrieved, **ECH Transaction Details** are shown on the screen displaying the following fields:
 - Tx. No.
 - Amount
- Click '**POS Tx.**' to view **Debit POS Transaction Details**. For each **Terminal Card Transactions Details** retrieved, **Debit POS Transaction Details** are shown on the screen displaying the following fields:
 - Tx. No.
 - Amount
- Click '**Pool Tx.**' to view Pool Transaction Details.

- The **‘Search’** and **‘Export’** buttons are disabled. The **‘Details’**, **‘Next’** (disabled when at last record), **‘Prev’** (disabled when at first record) and **‘Advice’** buttons are enabled.
- At this point of time you can see the details of a particular merchant by pressing the **‘Details’** button.
- You can navigate between various records of merchant and their corresponding transaction details by pressing the **‘Prev’** and **‘Next’** buttons.
- For **‘Single Merchant’**
 - **Either**
Enter valid **Merchant Id** and **Transfer Date**.
Press **‘Tab’**. Data is retrieved for that particular Merchant.
 - **Or**
Press the **‘Search’** button (Searchable fields are in Yellow legend. Wildcarding may be used in the field). Press **‘Ok’** in the List of Values after choosing the particular merchant and transfer date. Data is retrieved for the particular Merchant. **Merchant Name**, **Settlement Amount** are display only fields.
 - The **‘Search’** and **‘Export’** buttons are disabled. The **‘Details’** and **‘Advice’** buttons are enabled.
 - At this point of time you can see the details of the particular merchant by pressing the **‘Details’** button.
- **‘Clear’** will clear the form without raising Settlement advice..
- **‘Close’** will close the form without raising Settlement advice..

3.3.1.2 Raise Settlement Advice

- Press **‘Advice’** button. For **‘Single Merchant’** Settlement Advice is raised and the merchant transaction is updated by the Settlement Advice No. for that particular merchant. For **‘All Merchants’**, Settlement Advice is raised and the merchant transactions are updated by the Settlement Advice No. for all merchants.
- The **‘Details’** and **‘Advice’** buttons are disabled and **‘Export’** button is enabled.
- At this point, pressing **‘Clear’** button will clear the form without exporting the data to a flat file.
- At this point, pressing **‘Close’** button will close the form without exporting the data to a flat file.

Note: It will not be possible to export the data from this screen for the particular record, because data for this merchant will not be retrieved in this form again.

3.3.1.3 Export Settlement Advice

- Press **‘Export’** button. The settlement advice raised is exported to the flat files **ISLDDMMY.dat**, **ESLDDMMY.dat** and **POSDDMMY.dat** (for IEP, ECH and POS transactions respectively) in the export directory of the STARCOIN Server as defined in STARCOIN.ini (SETTLEMENT_EXPORT_DIR=<path>\).
The entire data from the settlement advice table is dumped in the file.

4 Queries and Reports

4.1 Introduction

This section deals with generation of the standard queries and reports.

4.1.1 Prerequisites

For Queries and Reports, records should exist in all the master as well as transaction data stores.

4.2 Customer

- **Access Path**
Queries / Reports → Customer

Displays all customers from a particular bank with vital data.

4.2.1 Retrieve the records

- **Either**

Enter valid data in **'Bank Id'** or enter valid data in **'Bank Name'** and **'Bank Id'** (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)

- **OR**

Press **'Search'** button in **'Bank Information'** block. A List of Values appears with list of Banks. After selecting the desired **Bank**, press **'OK'** button in the List of Values form to get a valid **'Bank Information'**

- Press **'Execute'** to fetch an existing record in the **'Customer Information'** block.
- **'Total No. of Customers'** is shown as summary information for **'Customer Information'** block and total number of **'Valid Cards'** and **'Redlisted Cards'** are shown as **'Customer Summary'** information.

4.2.2 Navigation

- At any point of time, pressing **'Clear'** button clears the screen so that new query can be made.
- At any point of time, pressing **'Close'** button closes the form.
- To get report of the query, press **'Print'** button after query has been executed.

- A report previewer appears on the screen with following buttons on top:-
 - **“Prev”** - Takes to previous page
 - **“Next”** - Takes to next page
 - **“First”** - Takes to the first page
 - **“Last”** - Takes to the last page
 - **“Page”** - Takes to page no entered in the box next to the button.
 - **“Print”** - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - **“Mail”** - The report can sent to personal mail account .
 - **“Close”** - Closes the previewer screen.
 - **“New”** - Creates another copy of previewer screen

4.2.3 Customer summary

- Valid cards:
Number of cards in status 'ACTIVE'.
- Red listed cards:
Number of cards of that bank, which are redlisted.

4.3 Customer / Card Balance

- **Access Path**
Queries / Reports → Customer /

This screen gives an overview to all Load / Unload and Payment transactions within a certain period for a specific card of a particular customer.

4.3.1 Retrieve the records

- **Either**
Enter valid data in **‘C&A Customer Id’** or enter valid data in **‘Customer Name’** and **‘Bank Customer Id’** and **‘C&A Customer Id’** (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)
- **OR**
Press **‘Search’** button in **‘Customer Card Information’** block. A List of Values appears with list of Customer Information. After selecting the desired Information, press **‘OK’** button in the List of Values form to get a valid Customer Information’
- Enter a valid **‘Card No’** or retrieve the same by pressing **‘Search’** button.
- Enter **‘From Date’** and **‘To Date’** in **‘DD.MM.YYYY’** format.
- Press **‘Execute’** to fetch **Load/Unload/Payment Transactions** on the main screen within the given range of **‘From Date’** and **‘To Date’**.
- The purse balance and the service charge paid by the customer is shown.

4.3.2 Load/Unload Transaction part

- **Transaction Date & Time**
Date, when the transaction was executed
- **IEP/ECH No.**
Unique number of the IEP or ECH payment application on the customer card.
- **Type**
Type of payment application: IEP or ECH.
- **Reason**
Type of transaction: Load or Unload.
- **Context**
Context of the transaction: Account , Cash or ATM (RFU).
- **Amount**
Loaded/Unloaded amount
- **Service Charge**
Service Charge Paid.
- **Bank Id**
Related Bank Id for the Customer Card.

4.3.3 Payment Transaction part

- **Transaction Date & Time**
Date, when the transaction was executed
- **Type**
Type of payment application : IEP or ECH or POS.
- **Amount**
Transaction amount
- **Terminal OpId**
Unique identifier for the merchant
- **Terminal Id**
Terminal serial number for that merchant.
- **IEP/ECH No.**
Unique number of the ECH payment application on the customer card.

4.3.4 Navigation

- At any point of time, pressing '**Clear**' button clears the screen so that a new query can be fired depending on option chosen.
- At any point of time, pressing '**Close**' button closes the form.
- At any point of time, pressing of 'Labels' in block 'Load / Unload Transactions' or in 'Payment Transactions' will sort the fetched records depending on which label is pressed..
- To get report of the data retrieved, press 'Print' button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - **"Prev"** - Takes to previous page
 - **"Next"** - Takes to next page

- **“First”** - Takes to the first page
- **“Last”** - Takes to the last page
- **“Page”** - Takes to page no entered in the box next to the button.
- **“Print”** - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
- **“Mail”** - The report can sent to personal mail account .
- **“Close”** - Closes the previewer screen.
- **“New”** - Creates another copy of previewer screen

4.4 Transactions

- **Access Path**
Queries / Reports → Transaction

Overview to all transactions within a certain period for one or all customers participating in the system.

4.4.1 Retrieve the records

- Select ‘Option’ for ‘Single Customer’ or ‘All Customer’.
- Enter ‘From Date’ and ‘To Date’ in ‘DD.MM.YYYY’ format.
- For ‘Single Customer’
 - Press **‘Tab’** to place the cursor on **‘C&A Customer Id’** field. At this stage **‘Search’** button is enabled.
 - **Either**
Enter valid data in **‘C&A Customer Id’** or enter valid data in **‘Customer Name’** and **‘Bank Customer Id’** and **‘C&A Customer Id’** (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)
 - **OR**
Press **‘Search’** button in **‘Customer Bank Information’** block. A List of Values appears with list of Customer Information. After selecting the desired Information, press **‘OK’** button in the List of Values form to get a valid **‘Customer Bank Information’**
 - Press **‘Execute’** to fetch **Load/Unload/Purchase Transactions** on the main screen within the given range of **‘From Date’** and **‘To Date’**.
- For ‘All Customer’
 - Press **‘Execute’** to fetch all existing records on the main screen within the given range of **‘From Date’** and **‘To Date’**.
 - You can navigate from one record to another of **‘Customer Bank Information’** by pressing the **‘Prev’** and **‘Next’** button. The corresponding data for **‘Load/Unload Transaction’** (if any) and **‘Purchase Transaction (ECH)’** (if any) is fetched in the corresponding blocks.

- If any data is fetched for 'Load/Unload Transaction' or 'Purchase Transaction (ECH)' or both press 'Summary' button to get 'Total Loading / Unloading Transactions', 'Total Loading / Unloading Amount', 'Total Purchase Transactions (ECH)' and 'Total Purchase Amount (ECH)' on a popup screen .
- Note: A message is shown in status bar if no data is fetched for 'Load/Unload Transaction' and / or 'Purchase Transaction (ECH)'.

4.4.2 Load/Unload transaction part

- **Tx Date**
Date, when the transaction was executed
- **BT Id**
Identifier of the bank service terminal executing the load/unload transaction.
- **Card No**
Unique customer card number
- **IEP/ECH No.**
Unique number of the IEP or ECH payment application on the customer card.
- **Amount**
Loaded/Unloaded amount.
- **Type**
Type of payment application: IEP or ECH.
- **Reason**
Additional status information.
- **Context**
Type of transaction: Load or Unload.
- **NTICC**
Customers card transaction counter.
- **Currency**
Currency code of transaction amount.
- **Advised**
Indicator if the transaction has already been settled.

4.4.3 Purchase transaction (ECH) part

- **Tx. Date**
Date, when the transaction was executed (Terminal time!)
- **Operator Id**
Unique identifier for the merchant
- **Terminal Id**
Terminal serial number for that merchant.
- **Card No.**
Unique customer card number.
- **ECH No**
Unique number of the ECH payment application on the customer card (IEP purchases are cleared in pool, so individual recorded transaction data are not displayed here).
- **NTICC**
Customers card transaction counter.

- **Settled**
Indicator if the transaction has already been settled.

4.4.4 Navigation

- At any point of time, pressing '**Clear**' button clears the screen so that a new query can be fired depending on option chosen.
- At any point of time, pressing '**Close**' button closes the form.
- To get report of the data retrieved for 'Single Customer' or 'All Customer', press '**Print**' button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - "**Prev**" - Takes to previous page
 - "**Next**" - Takes to next page
 - "**First**" - Takes to the first page
 - "**Last**" - Takes to the last page
 - "**Page**" - Takes to page no entered in the box next to the button.
 - "**Print**" - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - "**Mail**" - The report can sent to personal mail account .
 - "**Close**" - Closes the previewer screen.
 - "**New**" - Creates another copy of previewer screen

4.5 Terminal Card

- **Access Path**
Queries / Reports → Terminal card

Displays the vital terminal data of all terminals of one merchant.

4.5.1 Retrieve the records

- **Either**

Enter valid data in '**Merchant Id**' or enter valid data in '**Merchant Name**' and '**Merchant Id**' (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)

- **OR**

Press '**Search**' button in '**Merchant Information**' block. A List of Values appears with list of Merchants. After selecting the desired **Merchant**, press '**OK**' button in the List of Values form to get a valid '**Merchant Information**'.

- Press '**Execute**' to fetch Terminal Card records in the '**Terminal Card Information**' block.
- '**Total No. of New Cards**', '**Total No. of Active Cards**', '**Total No. of Restricted Use Cards**' and '**Total No. of Deactivated Cards**' are shown as '**Summary Information**'.

4.5.2 Terminal card information part

- **Operator Id**
Unique identifier for the merchant
- **Cluster Id**
Group identifier for the specific terminal
- **Terminal Id**
Terminal serial number for that merchant.
- **Terminal Card No.**
Unique number of the terminal card (PSAM)
- **Activation date**
Date of terminal card Personalisation
- **Expiry date**
Terminal card expiration date
- **NTTK**
Terminal card transaction counter
- **Service**
Whether the terminal card is of service PSAMIEP or BSTSAM
- **Status**
NEW, ACTIVE etc.
- **List Status**
Terminal card list status.

4.5.3 Summary information part

- **Total number of new cards**
Terminal cards of that specific merchant in state 'NEW' (started, but not yet personalised).
- **Total number of active cards**
Terminal cards of that specific merchant in state 'ACTIVE'.
- **Total number of restricted use cards**
RFU
- **Total number of deactivated cards**
Already deactivated terminal cards of that specific merchant.

4.5.4 Navigation

- At any point of time, pressing '**Clear**' button clears the screen so that new query can be fired.
- At any point of time, pressing '**Close**' button closes the form.
- To get report of the query, press '**Print**' button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - **"Prev"** - Takes to previous page
 - **"Next"** - Takes to next page
 - **"First"** - Takes to the first page
 - **"Last"** - Takes to the last page
 - **"Page"** - Takes to page no entered in the box next to the button.
 - **"Print"** - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - **"Mail"** - The report can sent to personal mail account .
 - **"Close"** - Closes the previewer screen.
 - **"New"** - Creates another copy of previewer screen

4.6 Merchant Balance

- **Access Path**
Queries / Reports → Merchant balance

This screen gives an overview of all the transactions for a Merchant. It also provides Merchant A/c wise summary information.

4.6.1 Retrieve the records

- **Either**
Enter valid data in '**Merchant Id**' or enter valid data in '**Merchant Name**' and '**Merchant Id**' (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)
- **OR**
Press '**Search**' button for '**Merchant Id**' or '**Merchant Name**'. A List of Values appears with list of Merchants. After selecting the desired **Merchant**, press '**OK**' button in the List of Values form to get a valid Merchant Information
- Enter 'From Date' and 'To Date' in 'DD.MM.YYYY' format.
- Press '**Execute**' to fetch information on '**Payment Transaction**' for the selected merchant within the given range of '**From Date**' and '**To Date**'.
- Merchant A/c wise balance and service charge information are shown as 'Summary Information'.
- 'Total Account Balance of the merchant' and 'Total service charge paid by the merchant' are shown as 'Summary Information'.

4.6.2 Payment Transactions part

- **Transaction Date & Time**
Date, when the transaction was executed
- **Terminal Id**
Unique identifier for the merchant
- **Account No.**
Merchant Bank's A/c No.
- **Type**
Type of payment application : IEP or ECH or POS.
- **Purchase Amount**
Transaction amount
- **Merchant Spec TermId**
Merchant Specific Terminal Id
- **IEP/ECH No.**
Unique number of the ECH payment application on the customer card.

4.6.3 Summary information part

- **Merchant A/c No.**
Merchant's different bank A/c No.

- **Bank Id**
Corresponding identifier for the Bank
- **Balance**
Balance corresponding to this Account within the given range of '**From Date**' and '**To Date**'.
- **Service Charge**
Total service charge paid from for this account within the given range of '**From Date**' and '**To Date**'.
- **Total Account Balance of the merchant**
Total balance for the merchant within the given range of '**From Date**' and '**To Date**'.
- **Total service charge paid by the merchant**
Total service charge paid by the merchant within the given range of '**From Date**' and '**To Date**'.

4.6.4 Navigation

- At any point of time, pressing '**Clear**' button clears the screen so that new query can be fired depending on option chosen.
- At any point of time, pressing '**Close**' button closes the form.
- At any point of time, pressing of 'Labels' in block 'Payment Transactions' will sort the fetched records depending on which label is pressed..
- To get report of the data retrieved, press '**Print**' button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - "**Prev**" - Takes to previous page
 - "**Next**" - Takes to next page
 - "**First**" - Takes to the first page
 - "**Last**" - Takes to the last page
 - "**Page**" - Takes to page no entered in the box next to the button.
 - "**Print**" - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - "**Mail**" - The report can sent to personal mail account .
 - "**Close**" - Closes the previewer screen.
 - "**New**" - Creates another copy of previewer screen

4.7 Terminal Transaction

- **Access Path**
Queries / Reports → Terminal transaction

List of transferred transactions within a certain period for one or all terminals.

4.7.1 Retrieve the records

- Select 'Option' for 'Single Terminal' or 'All Terminals'.
- Enter 'From Date' and 'To Date' in 'DD.MM.YYYY' format.
- For '**Single Terminal**'
 - Press '**Tab**' to place the cursor on '**Operator Id**' field. At this stage '**Search**' button is enabled.
 - Either
Enter valid data in '**Operator Id**', '**Cluster Id**' and '**Terminal Id**' (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)
 - **OR**
Press '**Search**' button in '**Terminal Information**' block. A List of Values appears with list of Terminal Information. After selecting the desired Information, press '**OK**' button in the List of Values form to get a valid '**Terminal Information**'
 - Press '**Execute**' to fetch all '**Terminal Card**' records on the screen within the given range of '**From Date**' and '**To Date**'. For each '**Terminal Card Information**' data, one or more '**IEP Pool Transaction**' and/or '**ECH Transaction**' records are fetched on the screen.
 - Navigate to the '**Terminal Card Information**' block. Press '- (Up Arrow)' and '- (Down Arrow)' to navigate between different records in the block. The corresponding '**IEP Pool Transaction**' and/or '**ECH Transaction**' records are shown.
- For '**All Terminals**'
 - Press '**Execute**' to fetch all '**Terminal Information**', '**Terminal Card Information**' records related to the Terminal & '**IEP Pool Transaction**' and/or '**ECH Transaction**' records related to the Terminal Card on the screen within the given range of '**From Date**' and '**To Date**'.
 - You can navigate from one record to another of '**Terminal Information**' by pressing the '**Prev**' and '**Next**' button. The corresponding data for '**Terminal Card Information**' is fetched in the corresponding block. For each '**Terminal Card Information**' data, you get several '**IEP Pool Transaction**' and/or '**ECH Transaction**' data.
 - Navigate to the '**Terminal Card Information**' block. Press '- (Up Arrow)' and '- (Down Arrow)' to navigate between different records in the block. The corresponding '**IEP Pool Transaction**' and '**ECH Transaction**' data are shown.
 - Press 'Summary' button to get 'Total Pool Transactions', 'Total Pool Transaction Amount', 'Total Purchase Transactions (ECH)' and 'Total Purchase Amount (ECH)' on a popup screen .

- Note: A message is shown in status bar if no data is fetched for 'IEP Pool Transaction' and / or 'ECH Transaction'.

4.7.2 Terminal Card Information Part

- **PSAM No.**
Unique terminal card number
- **Service**
PSAMIEP or BSTSAM
- **NTTK**
Terminal card transaction counter
- **Status**
Terminal card status ('ACTIVE', ...)
- **List Status**
Terminal card list status

4.7.3 IEP Pool Transaction part

- **Transfer Date**
Date the transaction has been transferred to the C&A System
- **Pool Id**
Unique identifier of the pool
- **Amount**
Transferred differential (actual pool amount - pool amount of last transfer) pool amount of that transfer
- **Settled**
Yes/No: An IEP Pool Transaction may not be settled because the settlement may not have run for that day or some of the transactions are critical because signature or other validations have failed.
- **Status**
Status indicates why the transactions have failed. If settled is No and status is OK, then these transactions will be settled later.

4.7.4 ECH Transaction part

- **Transfer date**
Date the transaction has been transferred to the C&A System
- **Card No.**
Unique customer card number
- **ECH No.**
Unique number of ECH payment application on that card
- **NTICC**
Customers card transaction counter
- **Amount**
Purchase transaction amount
- **Settled**
Yes/No: An ECH Transaction may not be settled because the settlement may not have

run for that day or some of the transactions are critical because signature or other validations have failed.

- **Status**

Status indicates why the transactions have failed. If settled is No and status is OK, then these transactions will be settled later.

4.7.5 **Navigation**

- At any point of time, pressing '**Clear**' button clears the screen so that new query can be fired depending on option chosen.
- At any point of time, pressing '**Close**' button closes the form.
- To get report of the data retrieved for 'Single Terminal' or 'All Terminals', press '**Print**' button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - '**Prev**' - Takes to previous page
 - '**Next**' - Takes to next page
 - '**First**' - Takes to the first page
 - '**Last**' - Takes to the last page
 - '**Page**' - Takes to page no entered in the box next to the button.
 - '**Print**' - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - '**Mail**' - The report can sent to personal mail account .
 - '**Close**' - Closes the previewer screen.
 - '**New**' - Creates another copy of previewer screen

4.8 Out Of Order Terminals

- **Access Path**
Queries / Reports → Out of order terminals

Information about out of order terminals for merchants, banks or all.

4.8.1 Retrieve information

- On selection of the option in the main menu, the Query form 'List of Out-Of-Order Terminals' appears on the screen, with cursor on the '**Bank Terminal**' of the '**Option**' radio button.
- Select '**Bank Terminal**' or '**Merchant Terminal**' or '**All**' from the '**Option**'.
- Press '**Execute**' button for a particular '**Option**' chosen to get '**Terminal Information**' records for the selected Terminal Type.
- '**Total No. of Bank Terminals**' and '**Total No. of Merchant Terminals**' are shown as '**Summary Information**'.
- **Note:** A message is shown in status bar if no data is fetched for any of the '**Option**' chosen.
- Terminal Category is PURCHASE or BANK terminal

4.8.2 Terminal information part

- **Operator Id**
Unique identifier for a merchant
- **Terminal Id**
Terminal serial number for that merchant.
- **Cluster Id**
Group identifier for the specific terminal
- **Location**
Place of terminal installation
- **Model Type**
Identifier for the type of terminal
- **Service status**
ACTIVE, UNDER REPAIR, SHUTDOWN
- **Last fault type**
Last error which occurred on that terminal

4.8.3 Summary information part

- **Total number of bank terminals**
Number of all 'ACTIVE' bank service terminals.
- **Total number of merchant terminals**
Number of all 'ACTIVE' merchant terminals.

4.8.4 Navigation

- At any point of time, pressing '**Clear**' button clears the screen so that new query can be fired depending on option chosen.
- At any point of time, pressing '**Close**' button closes the form.
- To get report of the data retrieved for '**Bank Terminal**' or '**Merchant Terminal**' or '**All**', press '**Print**' button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - "**Prev**" - Takes to previous page
 - "**Next**" - Takes to next page
 - "**First**" - Takes to the first page
 - "**Last**" - Takes to the last page
 - "**Page**" - Takes to page no entered in the box next to the button.
 - "**Print**" - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - "**Mail**" - The report can sent to personal mail account .
 - "**Close**" - Closes the previewer screen.
 - "**New**" - Creates another copy of previewer screen

4.9 Location Wise List Of Terminals

- **Access Path**
Queries / Reports → Terminal List

List of terminals sorted per location.

4.9.1 Retrieve the record

- Select 'Option' for 'Single Location' or 'All Locations'.
- For 'Single Location'
 - Place the cursor on '**Terminal Location**' field. At this stage '**Search**' button is enabled.
 - **Either**
Enter valid data in '**Terminal Location**' (Searchable fields are in Yellow legend. Wildcarding may be used in both of the fields)
 - **OR**
Press '**Search**' button in '**Terminal Location**' block. A List of Values appears with list of Terminal Location Information. After selecting the desired Information, press '**OK**' button in the List of Values form to get a valid '**Terminal Location Information**'
 - Press '**Execute**' to fetch '**Terminal Information**' records for the selected Terminal Location.
- For 'All Locations'
 - Press '**Execute**' to fetch all '**Terminal Locations**' & corresponding '**Terminal Information**' records on the screen.
 - You can navigate from one record to another of '**Terminal Location**' by pressing the '**Prev**' and '**Next**' button. The corresponding data for '**Terminal Information**' is fetched in the corresponding blocks.
- 'Total No. of Terminals', 'Total No. of Active Terminals', 'Total No. of Under Repair Terminals' and 'Total No. of Shutdown Terminals' are shown as 'Summary Information'.

4.9.2 Terminal information part

- **Operator Id**
Unique identifier for a merchant
- **Terminal Id**
Terminal serial number for that merchant.
- **Cluster Id**
Group identifier for the specific terminal
- **Category**
Bank Service- or Merchant Terminal
- **Bank/Merchant Name**
Operator of the terminal.
- **Status**
Active, Under Repair or Shutdown

4.9.3 Summary information part

- **Total number of Terminals**
Total number of terminals in that terminal location.
- **Total number of Active Terminals**
Total number of active terminals in that terminal location.
- **Total number of under repair Terminals**
Total number of under repair terminals in that terminal location.
- **Total number of Shutdown Terminals**
Total number of shutdown terminals in that terminal location.

4.9.4 Navigation

- At any point of time, pressing **‘Clear’** button clears the screen so that new query can be fired depending on option chosen.
- At any point of time, pressing **‘Close’** button closes the form.
- To get report of the data retrieved for **‘Single Location’** or **‘All Locations’**, press **‘Print’** button after query has been executed.
- A report previewer appears on the screen with following buttons on top:-
 - **“Prev”** - Takes to previous page
 - **“Next”** - Takes to next page
 - **“First”** - Takes to the first page
 - **“Last”** - Takes to the last page
 - **“Page”** - Takes to page no entered in the box next to the button.
 - **“Print”** - Prints the report shown on the screen in the local printer. The printer has to be a postscript printer (i.e. Laserjet or Deskjet printer) .It does not create a ASCII dump file (oracle limitations)
 - **“Mail”** - The report can sent to personal mail account .
 - **“Close”** - Closes the previewer screen.
 - **“New”** - Creates another copy of previewer screen

5 Utilities

5.1 Introduction

5.1.1 Prerequisites

For Export Processing, records should exist in Debit Advice, IEP Settlement Advice & ECH Settlement Advice which has not yet been exported.

5.2 Generate export file of Debit Advice

- **Access Path**

Utilities → Export
→ Debit Advice

All debit advice which have been not been exported to a flat file can be exported. Hence, only those customers who have transactions for which debit advice has been raised but not exported will be shown.

5.2.1 Retrieve Existing Customer record

- Select either the 'Single Customer' or 'All Customers' option.
- For 'All Customers'
- No customer data is shown.
- For 'Single Customers'
 - **Either**
Enter valid **Bank Id** and **Bank Customer Id** fields or enter valid **Bank Id** and **Bank A/c No.**
Press '**Tab**'.
 - **Or**
Press the '**Search**' button (Searchable fields are in Yellow legend. Wildcarding may be used in the field). List of Customers for whom Debit Advice has been raised but not yet exported will be displayed. Press '**Ok**' in the List of Values for selecting a particular customer.
- Following Customer Information will be displayed on the screen:
 - Bank Id
 - Bank Customer Id
 - Bank A/c No.
 - Customer Name
 - Bank Name
 - Bank BIN

- The **‘Search’** button is disabled. The **‘Export’** button is enabled.
- At this point, pressing **‘Clear’** button will clear the form without exporting the data to a flat file.
- At this point, pressing **‘Close’** button will close the form without exporting the data to a flat file.

5.2.2 Export Debit Advice

- Press **‘Export’** button. The debit advice raised is exported to a flat file **DAVDDMMY.dat** (IEP/ECH load/unload settlement data) in the Export Directory of the STARCOIN Server for a **‘Single Customers’** or for **‘All Customers’** as per option chosen. The entire data from the debit advice table is dumped in the file.

5.3 Generate export file of Settlement Advice

- **Access Path**
Utilities → Export
→ Settlement Advice

All settlement advice which have been not been exported to a flat file can be exported. Hence, only those merchants who have transactions for which settlement advice has been raised but not yet exported will be shown.

5.3.1 Retrieve Existing Merchant record

- Select either the **‘Single Merchant’** or **‘All Merchants’** option.
- For **‘All Merchants’**
 - No merchant data is shown.
- For **‘Single Merchant’**
 - **Either**
Enter valid **Merchant Id** and **Transfer Date**.
Press **‘Tab’**.
 - **Or**
Press the **‘Search’** button (Searchable fields are in Yellow legend. Wildcarding may be used in the field). List of Merchants for whom Settlement Advice has been raised but not yet exported will be displayed. Press **‘Ok’** in the List of Values for selecting a particular Merchant.
 - Following Merchant Information will be displayed on the screen:
 - Merchant Id
 - Transfer Date
 - Merchant Name
- The **‘Search’** button is disabled. The **‘Export’** button is enabled.
- At this point, pressing **‘Clear’** button will clear the form without exporting the data to a flat file.
- At this point, pressing **‘Close’** button will close the form without exporting the data to a flat file.

5.3.2 Export Settlement Advice

- Press '**Export**' button. The settlement advice raised is exported to the flat files **ISLDDMMY.dat** (IEP purchase settlement data) , **ESLDDMMY.dat** (ECH purchase settlement data) and **POSDDMMY.dat** (POS purchase settlement data) in the Export Directory of the STARCOIN Server. The entire data from the settlement advice table is dumped in the file.

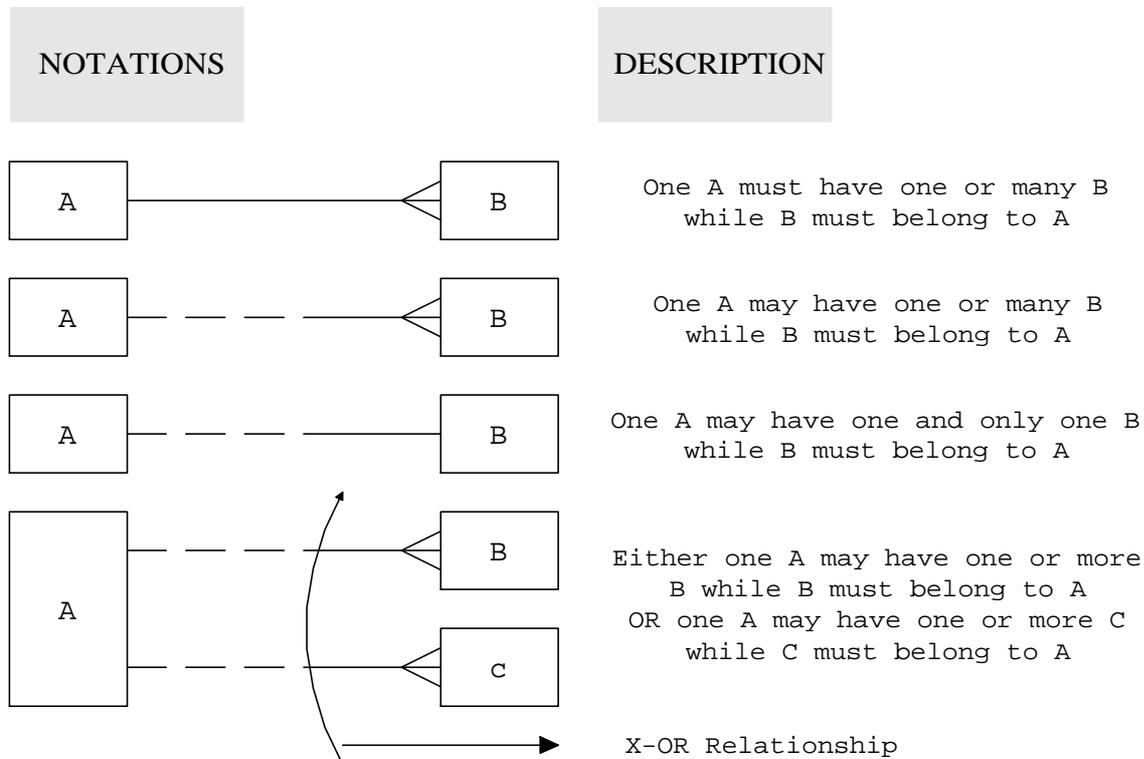
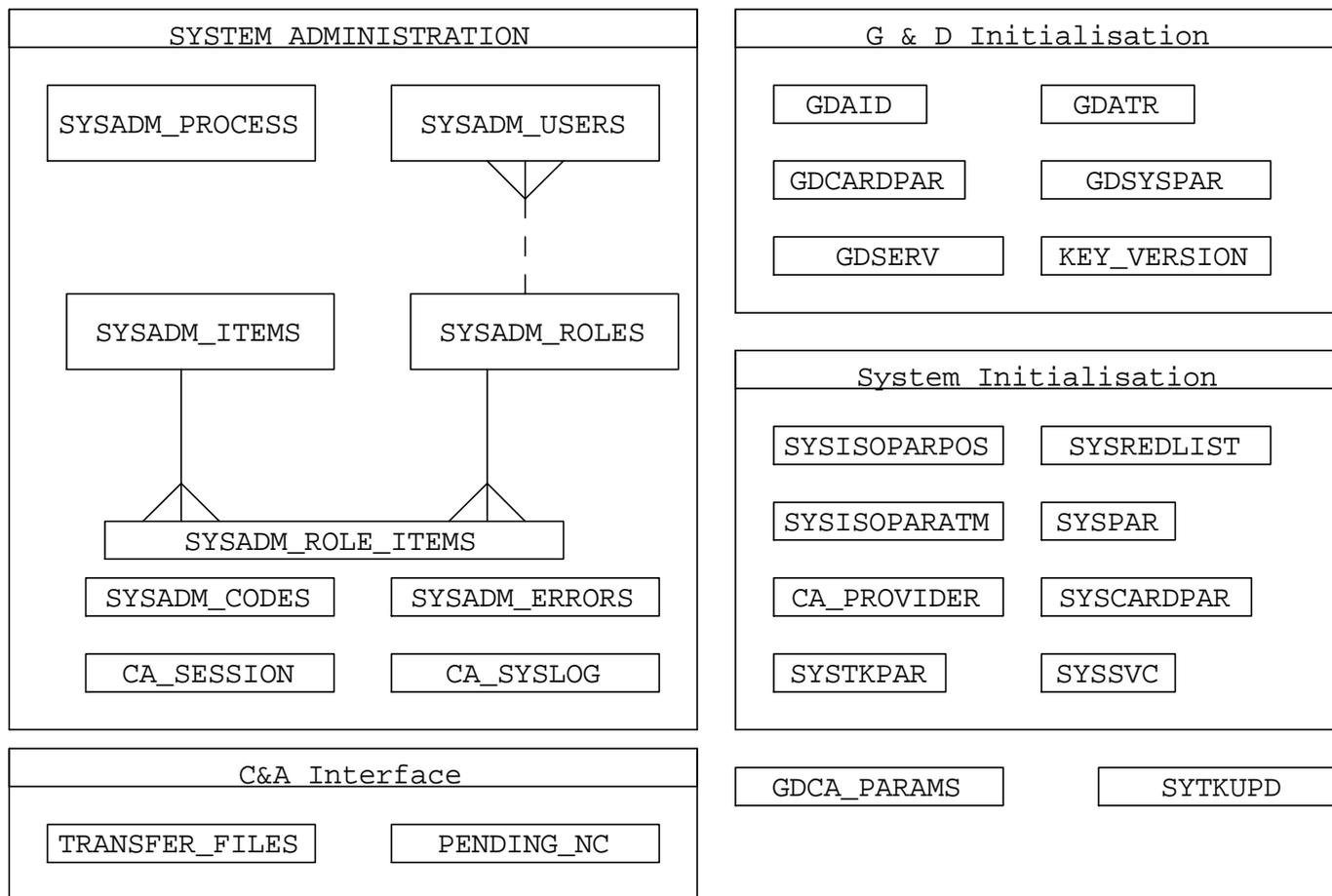


Figure 6-1 Entity relationship diagram

6.2 Appendix B - Table structure of C&A System

Table Name : BANK
Description : This table is used to keep Bank Master information.
Primary Key : Bank_Id
Foreign Key : Bank_PoolId (BANK_POOL.BANKPOOL_POOLID)

Name	Null?	Type	Description
BANK_59PANID	NOT NULL	NUMBER(5)	Identifier indicating group sharing for the Bank in 59PAN file (several values: RFU)
BANK_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
BANK_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
BANK_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
BANK_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
BANK_AUTHLIMITATM	NOT NULL	NUMBER(10)	Authorisation limit for ATM transactions.
BANK_AUTHLIMITPOS	NOT NULL	NUMBER(10)	Authorisation limit for POS transactions.
BANK_AUTHTIMEOUT	NOT NULL	NUMBER(3)	Maximum waiting time for on-line authorisation of the purchase transactions.
BANK_BIN	NOT NULL	NUMBER(15)	National Identifier for the Bank
BANK_CASHACCNO	NULL	NUMBER(20)	Bank Cash Account No which is to be used for settlement
BANK_CASHLOADAMT	NULL	NUMBER(10)	Total Load from cash amount
BANK_CASHUNLOADAMT	NULL	NUMBER(10)	Total Unload to cash amount
BANK_CITY	NULL	VARCHAR2(30)	City part of Address of the Bank
BANK_CONTACTPERSON	NULL	VARCHAR2(30)	Contact Person for the Bank
BANK_COUNTRY	NULL	VARCHAR2(30)	Country where bank is located
BANK_DELDATE	NULL	DATE	Bank deleted date
BANK_DELFLAG	NOT NULL	NUMBER(1)	Default '0'. Flag indicating whether the Bank has been deleted.
BANK_FAX	NULL	VARCHAR2(30)	Fax number of the bank
BANK_ID	NOT NULL	NUMBER(4)	C&A system specific Unique Number identifying for each Bank
BANK_ISO317_316	NOT NULL	NUMBER(4)	ICC currency component and code as used in POS transactions.
BANK_ISO401_ICCATM	NOT NULL	NUMBER(10)	Off-line ATM floor limit of ICC
BANK_ISO401_ICCPOS	NOT NULL	NUMBER(10)	Off-line POS floor limit of ICC
BANK_ISO402_ATM	NOT NULL	NUMBER(3)	Maximum number of off-line ATM authorisations
BANK_ISO402_POS	NOT NULL	NUMBER(3)	Maximum number of off-line POS authorisations
BANK_ISO404_ATM	NOT NULL	NUMBER(5)	Maximum days off-line.
BANK_ISO404_POS	NOT NULL	NUMBER(5)	Maximum days off-line.
BANK_ISO406_ATM	NOT NULL	NUMBER(10)	Maximum total off-line ATM tx. amount
BANK_ISO406_POS	NOT NULL	NUMBER(10)	Maximum total off-line POS tx. amount
BANK_ISO408_ATM	NOT NULL	NUMBER(10)	Revolving credit cycle limit for ATM Tx.
BANK_ISO408_POS	NOT NULL	NUMBER(10)	Revolving credit cycle limit for POS Tx.
BANK_ISO409_ATM	NOT NULL	NUMBER(3)	Revolving credit cycle length for ATM tx. (Daily/Weekly)
BANK_ISO409_POS	NOT NULL	NUMBER(3)	Revolving credit cycle length for POS tx. (Daily/Weekly)
BANK_NAME	NOT NULL	VARCHAR2(30)	Name of the Bank
BANK_OTHTXNSVCFLG	NULL	NUMBER(1)	Flag to indicate whether this bank pays service charge(s) for transactions done at other bank.
BANK_POOLID	NULL	NUMBER(5)	Bank Pool to which the bank belongs
BANK_PURGEDCASHLOADAMT	NULL	NUMBER(10)	Total Load from cash amount for which transactions are purged out
BANK_PURGEDCASHUNLOADAMT	NULL	NUMBER(10)	Total Unload from cash amount for which transactions are purged out
BANK_PURGEDSVCAMT	NULL	NUMBER(10)	Total svc amount purged out.
BANK_SECTORID	NULL	NUMBER(2)	Sector identifier for the bank (RFU - not displayed)
BANK_STREET	NULL	VARCHAR2(30)	street part of Address of the Bank
BANK_SVCACCNO	NULL	NUMBER(20)	Bank Service Charge Account No which is to be used for settlement
BANK_SVCAMT	NULL	NUMBER(10)	Total Service charge paid by Bank

BANK_SVCFLAG	NULL	NUMBER(1)	Flag to Indicate whether the Bank pays service charges for all its customers and/or merchants OR the Customers and/or merchants of this bank have to pay their own service charges.
BANK_TELEFON	NULL	VARCHAR2(30)	Telephone Number for the Bank
BANK_ZIP	NULL	VARCHAR2(30)	ZIP Code part of Address of the Bank

Table 6-1: Structure of table BANK

Table Name : BANK_POOL
Description : This table is used to keep Pool master information
Primary Key : BANKPOOL_POOLID
Foreign Key : None

Name	Null?	Type	Description
BANKPOOL_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
BANKPOOL_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
BANKPOOL_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
BANKPOOL_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
BANKPOOL_BANKID	NULL	NUMBER(4)	Unique Identifier for the pool's corresponding Bank where the pool account is located
BANKPOOL_CURRIEP	NOT NULL	NUMBER(4)	Actual Currency for the Pool
BANKPOOL_DELDATE	NULL	DATE	Bank Pool Deleted Date
BANKPOOL_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag to indicate deleted Bank Pools
BANKPOOL_LOADNR	NOT NULL	NUMBER(10)	Number of loading transactions on this pool Default 0
BANKPOOL_LOADTM	NOT NULL	NUMBER(15)	Cumulated load amounts of this pool Default 0
BANKPOOL_PAYMENTNR	NOT NULL	NUMBER(10)	Number of payment transactions on this pool . Default 0
BANKPOOL_PAYMENTTM	NOT NULL	NUMBER(15)	Cumulated payment amounts of this pool Default 0
BANKPOOL_POOLACCNO	NULL	NUMBER(20)	Bank pool Account No which is to be used for settlement
BANKPOOL_POOLID	NOT NULL	NUMBER(5)	Unique identifier for each Bank pool. Automatically set up by the C&A system according to GDInit_MaxPool.
BANKPOOL_POOLNAME	NOT NULL	VARCHAR2(30)	Description for owner of that pool
BANKPOOL_TM	NOT NULL	NUMBER(15)	Current Balance for this pool . Default 0
BANKPOOL_UNLOADNR	NOT NULL	NUMBER(10)	Number of unloading transactions on this pool. Default 0
BANKPOOL_UNLOADTM	NOT NULL	NUMBER(15)	Cumulated unload amounts of this pool. Default 0

Table 6-2 : Structure of table BANK_POOL

Table Name : CARD_POOL
Description : This table is used to keep pool-wise purchase transaction details
Primary Key : CARDPOOL_NO
Foreign Key : CARDPOOL_PSAM (TRM_CARD.TRMCARD_PSAM)

Name	Null?	Type	Comment
CARDPOOL_ARCHFLAG	NOT NULL	CHAR(1)	CardPool archived confirmation: Default: 'N', after archivation changed to 'Y'
CARDPOOL_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
CARDPOOL_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
CARDPOOL_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
CARDPOOL_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
CARDPOOL_CRITICAL	NOT NULL	NUMBER(1)	0 : Indicates valid transaction 1 : Erroneous Transaction
CARDPOOL_CUMLTM	NULL	NUMBER(15)	Cumulated transaction amount for the pool in this terminal card as received from the Transfer File
CARDPOOL_NC	NOT NULL	NUMBER(5)	Reconciliation or the transfer number for this PSAM
CARDPOOL_NI	NULL	NUMBER(5)	Total number of individual transactions for this PSAM transfer
CARDPOOL_NO	NOT NULL	NUMBER	Unique Pool Transaction Number
CARDPOOL_POOLID	NOT NULL	NUMBER(5)	Pool Identifier for the PSAM (This will occur 14/20 times for each PSAM+TransferDate)
CARDPOOL_POOLSTLNO	NULL	NUMBER	Settlement advice number indicating whether the advice for this pool has been generated
CARDPOOL_PSAM	NOT NULL	NUMBER(10)	Unique Number identifying for each terminal card
CARDPOOL_TM	NULL	NUMBER(15)	Total transaction amount for the pool in this terminal card (This will occur 14/20 times for each PSAM + TransferDate)
CARDPOOL_TRANSFERDATE	NOT NULL	DATE	Transfer date and time stamp for the PSAM transfer session or system clearing date/time (if DE '0..0' in reconc. data)

Table 6-3 : Structure of table CARD_POOL

Table Name : CA_PROGRAM
Description : This table is used to keep module information for maintaining System Log.
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
CPG_MODULEDESC	NOT NULL	VARCHAR2(60)	Module description
CPG_MODULENAME	NOT NULL	VARCHAR2(10)	Module Name

Table 6-4 : Structure of table CA_PROGRAM

Table Name : CA_PROVIDER
Description : This table is used to keep System Provider information
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
CAP_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
CAP_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
CAP_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
CAP_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
CAP_CITY	NULL	VARCHAR2(30)	City part of the Address of the CA Provider
CAP_CONTACTPERSON	NULL	VARCHAR2(30)	Contact Person for the CA Provider
CAP_COUNTRY	NULL	VARCHAR2(30)	Country of System provider
CAP_DELDATE	NULL	DATE	CA Provider Deleted Date
CAP_DELFLAG	NULL	NUMBER	Default 0. Flag to indicate deleted CA Provider
CAP_FAX	NULL	VARCHAR2(30)	Fax number of System provider
CAP_NAME	NOT NULL	VARCHAR2(30)	The name of the CA Provider
CAP_STREET	NULL	VARCHAR2(30)	Street part of the Address of the CA Provider
CAP_SVCACCNO	NOT NULL	NUMBER(20)	Bank Account No of the CA Provider for service charges
CAP_SVCBANKID	NOT NULL	NUMBER(4)	Service providers Bank (for service charges)
CAP_TELEFON	NULL	VARCHAR2(30)	The Telephone number of the CA Provider
CAP_ZIP	NULL	VARCHAR2(30)	ZIP Code part of the Address of the CA Provider

Table 6-5 : Structure of table CA_PROVIDER

Table Name : CA_SESSION
Description : This table is used to keep the information about the database session for a particular STARCOIN instance.
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
CAS_CAUSERID	NOT NULL	VARCHAR2(20)	Cause of data manipulation viz Insert, Update , Delete
CAS_MODULENAME	NOT NULL	VARCHAR2(10)	Name of the module
CAS_OPERATIONDESC	NULL	VARCHAR2(100)	Description of the data manipulation
CAS_SESSIONID	NOT NULL	VARCHAR2(100)	Session Id for a particular STARCOIN instance

Table 6-6 : Structure of table CA_SESSION

Table Name : CA_SYSLOG
Description : This table is used to keep the log of possible insertion, updating , deletion in the database.
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
CSL_CAUSERID	NOT NULL	VARCHAR2(20)	Cause of data manipulation viz Insert, Update , Delete
CSL_DATETIME	NOT NULL	NUMBER(14)	Date and time of data manipulation
CSL_MODULENAME	NULL	VARCHAR2(10)	Name of the module
CSL_NEWVALUE	NULL	VARCHAR2(600)	New value of the affected record
CSL_OLDVALUE	NULL	VARCHAR2(600)	Old value of the affected record
CSL_OPERATIONDESC	NULL	VARCHAR2(100)	Description of the data manipulation
CSL_REMARK	NULL	VARCHAR2(100)	Remark, if any
CSL_REPORTFLAG	NOT NULL	NUMBER(1)	Flag to indicate whether report has been generated for this entry.
CSL_SESSIONID	NOT NULL	VARCHAR2(100)	Session Id for a particular STARCOIN instance
CSL_TABLENAME	NOT NULL	VARCHAR2(30)	Table on which data manipulation is done

Table 6-7 : Structure of table CA_SYSLOG

Table Name : CUSTOMER
Description : This table is used to keep Customer information
Primary Key : CUST_CUSTNR
Foreign Key : CUST_BANKID (BANK.BANK_ID)

Name	Null?	Type	Description
CUST_ATMAMT	NULL	NUMBER(10)	Total amount withdrawn via ATM transaction
CUST_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
CUST_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
CUST_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
CUST_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
CUST_AUTHLDAMT	NULL	NUMBER(10)	Authorised Load Amount for the Customer
CUST_BANKACCNO	NULL	NUMBER(20)	Bank Account No of the Customer
CUST_BANKCUSTID	NULL	VARCHAR2(20)	Issuing bank specific Customer Id (Indispensable if no acc. number, name, ... delivered by the bank)
CUST_BANKID	NOT NULL	NUMBER(4)	Unique identifier for the customers corresponding bank
CUST_CITY	NULL	VARCHAR2(30)	The City part of Address of the customer
CUST_COUNTRY	NULL	VARCHAR2(30)	Country where customer is living
CUST_CUSTNR	NOT NULL	NUMBER(20)	Unique identifier for each Customer (C&A system specific)
CUST_DBPOSAMT	NULL	NUMBER(10)	Total DBPOS transaction amount
CUST_DELDATE	NULL	DATE	Customer Deleted Date
CUST_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag to indicate deleted customers
CUST_DOB	NULL	DATE	Date of Birth for the customer
CUST_FIRSTNAME	NULL	VARCHAR2(30)	First name of the customer
CUST_LASTUPDDATE	NULL	DATE	Last Date of Updating of Customer's Authorised Load Amount
CUST_NAME	NULL	VARCHAR2(30)	The name of the customer
CUST_PURGEDATMAMT	NULL	NUMBER(10)	Total purged amount for ATM
CUST_PURGEDDBPOSAMT	NULL	NUMBER(10)	Total Purged DBPOS transaction amount
CUST_PURGEDSVCAMT	NULL	NUMBER(10)	Total purged service charge amount
CUST_STREET	NULL	VARCHAR2(30)	The Street part of Address of the customer
CUST_SVCAMT	NULL	NUMBER(10)	Total service charge paid
CUST_TELEFON	NULL	VARCHAR2(30)	The Telephone number of the customer
CUST_TITLE	NULL	VARCHAR2(30)	Letter title of the card holder
CUST_ZIP	NULL	VARCHAR2(30)	The ZIP Code part of Address of the customer

Table 6-8 : Structure of table CUSTOMER

Table Name : CUST_CARD
Description : This table is used to keep Customer's Card information
Primary Key : CUSTCARD_CARDNR
Foreign Key : CUSTCARD_CUSTNR (CUSTOMER.CUST_CUSTNR)

Name	Null?	Type	Description
CUSTCARD_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
CUSTCARD_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
CUSTCARD_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
CUSTCARD_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
CUSTCARD_AWS	NOT NULL	NUMBER(2)	Identifier for card functionality (depending on type of card - RFU)
CUSTCARD_CARDNR	NOT NULL	NUMBER(20)	Unique Number identifying for each Customer Card (0000 & PID (3) & N(13) N coded)
CUSTCARD_CUSTNR	NOT NULL	NUMBER(20)	Unique Identifier for the card's corresponding customer (C&A system specific)
CUSTCARD_DELDATE	NULL	DATE	Customer Card deleted date
CUSTCARD_DELFLAG	NOT NULL	NUMBER(1)	Default 0.Flag to indicate deleted Customer Card
CUSTCARD_DUPLNUM	NOT NULL	NUMBER(2)	Number of duplicate issued (if any) for this card (+1 at Renewal or Replacement)
CUSTCARD_ISO305	NOT NULL	VARCHAR2(20)	Number of the Current Cardholder Id 0 & 67 & CustCard_CardNr & LUN
CUSTCARD_ISO306	NULL	VARCHAR2(30)	Bank BIN for the Customer's bank
CUSTCARD_ISO307	NOT NULL	NUMBER(5)	Cardholder id sequence number for the current file (RFU - not displayed)
CUSTCARD_ISO309	NULL	DATE	Date on which the Customer card is effective (Personalisation date)
CUSTCARD_ISO310	NOT NULL	DATE	Date on which the Customer card expires
CUSTCARD_ISO317_316	NOT NULL	NUMBER(4)	ICC currency component and code as used in POS transactions
CUSTCARD_ISO401_ICCATM	NOT NULL	NUMBER(10)	Off-line ATM floor limit of ICC
CUSTCARD_ISO401_ICCPOS	NOT NULL	NUMBER(10)	Off-line POS floor limit of ICC
CUSTCARD_ISO402_ATM	NOT NULL	NUMBER(3)	Maximum number of off-line ATM authorisations
CUSTCARD_ISO402_POS	NOT NULL	NUMBER(3)	Maximum number of off-line POS authorisations
CUSTCARD_ISO404_ATM	NOT NULL	NUMBER(5)	Maximum days off-line
CUSTCARD_ISO404_POS	NOT NULL	NUMBER(5)	Maximum days off-line
CUSTCARD_ISO406_ATM	NOT NULL	NUMBER(10)	Maximum total off-line ATM tx. amount
CUSTCARD_ISO406_POS	NOT NULL	NUMBER(10)	Maximum total off-line POS tx. amount
CUSTCARD_ISO408_ATM	NOT NULL	NUMBER(10)	Revolving credit cycle limit for ATM Tx.
CUSTCARD_ISO408_POS	NOT NULL	NUMBER(10)	Revolving credit cycle limit for POS Tx.
CUSTCARD_ISO409_ATM	NOT NULL	NUMBER(3)	Revolving credit cycle length for ATM tx. (Daily/Weekly)
CUSTCARD_ISO409_POS	NOT NULL	NUMBER(3)	Revolving credit cycle length for POS tx. (Daily/Weekly)
CUSTCARD_ISO506	NULL	VARCHAR2(12)	Card acceptor name and location
CUSTCARD_ISSDATE	NULL	DATE	Customer Card Issue Date (date of card set up in database)
CUSTCARD_LISTSTATUS	NOT NULL	NUMBER(1)	Status which shows whether the customer card is under red List(1), Black List(2) or neither(0)
CUSTCARD_LKZ	NOT NULL	NUMBER(3)	Indicates whether the card limit is weekly or daily (Default value = 80 weekly limit)
CUSTCARD_NEWCARDNR	NULL	NUMBER(20)	Indicates the card number which replaces the existing one
CUSTCARD_NTICC	NULL	NUMBER(5)	Transaction Number for this card
CUSTCARD_PERDATE	NULL	DATE	Date to indicate whether the customer Card personalisation data have been generated and exported.
CUSTCARD_POSLIMIT	NOT NULL	NUMBER(10)	LKZ related Limit for the Customer Card (Bank auth. cards have a higher limit)
CUSTCARD_SERVICE	NOT NULL	NUMBER(5)	Indication whether card is for POS, IEP, ECH, Bank,... (refer to GMW08_xx.doc)
CUSTCARD_STATUS	NOT NULL	NUMBER(2)	Current Status for the card : could be NEW(01), ACTIVE(02),.... Extra list box for reason (fake, lost, stolen,...)
CUSTCARD_STATUSDATE	NULL	DATE	Date when topical status was set or state reason occurred (e.g. loss, theft,..)

Name	Null?	Type	Description
CUSTCARD_STATUSREASON	NULL	VARCHAR2(20)	Indicates the reason, why a card has been set to a certain state (ref. CustCard_STATUS)

Table 6-9 : Structure of table CUST_CARD

Table Name : CUST_TRANSACTION
Description : This table is used to keep summarised information on Customer Transaction records
Primary Key : CUSTTRANS_NO
Foreign Key : CUSTTRANS_IEPECH (IEPECH.IEPECH_IEPECH)
 CUSTTRANS_PSAM(TRM_CARD.TRMCARD_PSAM)

Name	Null?	Type	Description
CUSTTRANS_AC	NULL	NUMBER(3)	Action code of authorisation request from C&A to Bank stored for logging.
CUSTTRANS_AI	NULL	NUMBER(2)	Action Indicator of authorisation request of Terminal
CUSTTRANS_ARCHFLAG	NOT NULL	CHAR(1)	Customer transaction archived confirmation: Default: 'N', after archivation changed to 'Y'
CUSTTRANS_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
CUSTTRANS_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
CUSTTRANS_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
CUSTTRANS_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
CUSTTRANS_BTID	NOT NULL	NUMBER(6)	Unique identifier for the bank terminal executing the transaction (BT_Id).
CUSTTRANS_CARDNR1	NOT NULL	NUMBER(20)	First entered Customer card number for this particular transaction (Required for POS loading where the cash is being transferred from Bank Clerk card to Customer card) This card number is used always as the source account card number for raising debit advice, but only in case of LOADING
CUSTTRANS_CARDNR2	NOT NULL	NUMBER(20)	Next entered Customer card number for this particular transaction (Required for POS loading where the cash is being transferred from Bank Clerk card to Customer card)
CUSTTRANS_CCICC	NULL	VARCHAR2(4)	Last completion code of the cardholder card.
CUSTTRANS_CCTK	NULL	VARCHAR2(4)	Last completion code of the Terminal Card
CUSTTRANS_DBADVNO	NULL	NUMBER	Debit Advice Number to indicate whether debit advice has been raised or not
CUSTTRANS_DEXPIEP	NOT NULL	DATE	Date on which the IEP or ECH expires
CUSTTRANS_IEPECH	NOT NULL	NUMBER(14)	IEP or ECH Number for the customer card doing the transaction
CUSTTRANS_ISO310	NOT NULL	DATE	Date on which the Customer card expires
CUSTTRANS_ISO504	NOT NULL	DATE	Transaction Date and time (ISO_504 + ISO_505)
CUSTTRANS_ISO510	NOT NULL	NUMBER(10)	Amount that has been transacted
CUSTTRANS_ISO512	NOT NULL	NUMBER(4)	Currency code of transacted amount
CUSTTRANS_NO	NOT NULL	NUMBER	Unique Number identifying for each Customer Transaction
CUSTTRANS_NTICC1	NOT NULL	NUMBER(5)	Transaction number for the customer card (POS funds raising transaction)
CUSTTRANS_NTICC2	NOT NULL	NUMBER(5)	Transaction number for the customer card (Load transaction)
CUSTTRANS_NTK	NOT NULL	NUMBER(10)	Transaction number of Terminal card
CUSTTRANS_OUTSTFLAG	NULL	NUMBER(1)	Transaction Confirmation : 0 - Confirmation arrived, 1 - Confirmation not arrived , 2 - Lost Data (confirmation will not arrive on-line . May require manual clearance)
CUSTTRANS_PARAM1	NULL	VARCHAR2(255)	Variable containing important parameter
CUSTTRANS_POOLID	NOT NULL	NUMBER(5)	Pool Id for the customer pool, where the amount will be updated (for ECH: standard pool 'EC 00')
CUSTTRANS_PPIEP	NOT NULL	NUMBER(6)	Purse Provider for the IEP. Together, PPIEP+IEP make a unique IEP/ECH identifier for an IEP/ECH in a transaction
CUSTTRANS_PSAM	NOT NULL	NUMBER(10)	Terminal Card No
CUSTTRANS_REASON	NOT NULL	NUMBER(2)	Reason for which this transaction has happened. For LOAD(01) or UNLOAD(02)
CUSTTRANS_SVCCHARGE	NULL	NUMBER(10)	Service Charge required for transaction
CUSTTRANS_TE	NULL	NUMBER(2)	Transaction technical error code (stored for logging purpose)
CUSTTRANS_TRANSCONTEXT	NOT NULL	NUMBER(2)	Context of transaction to indicate whether the LOAD/UNLOAD was with CASH or was it to customer account
CUSTTRANS_TXSTATUSCODE	NULL	NUMBER(3)	Transaction status code (stored for logging purpose).
CUSTTRANS_TYPE	NOT NULL	NUMBER(2)	Type to indicate whether it is an IEP(01), ECH(02) or POS(03) transaction

CUSTTRANS_VKOFF	NULL	VARCHAR2(4)	Off-line tx key version
CUSTTRANS_VKON	NULL	VARCHAR2(4)	On-line tx key version

Table 6-10 : Structure of table CUST_TRANSACTION

Table Name : DBPOS_ADVICE
Description : This table is used to keep summarised information on Debit POS Transactions.
Primary Key : DBPADV_NO
Foreign Key : DBPADV_TRANNO (DBPOS_TRANSACTION.DBPOSTRAN_NO)

Name	Null?	Type	Description
DBPADV_AMT	NOT NULL	NUMBER(10)	Transaction amount
DBPADV_ARCHFLAG	NOT NULL	CHAR(1)	Archive flag (Default 'N' - Not archived)
DBPADV_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
DBPADV_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
DBPADV_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
DBPADV_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
DBPADV_BANKCUSTID	NOT NULL	VARCHAR2(20)	Customer's BankCustID
DBPADV_CARDNR	NOT NULL	NUMBER(20)	Customer's card number
DBPADV_DATETIME	NOT NULL	DATE	Date and time of the transaction
DBPADV_EXPFLAG	NOT NULL	NUMBER(1)	Exported flag (Default 0 Not exported)
DBPADV_MRCACCNO	NOT NULL	NUMBER(20)	Merchant account number
DBPADV_MRCBIN	NOT NULL	NUMBER(15)	Merchant Bank's BIN
DBPADV_MRCID	NOT NULL	NUMBER(20)	Merchant Id
DBPADV_MRCNAME	NOT NULL	VARCHAR2(30)	Merchant Name
DBPADV_NO	NOT NULL	NUMBER	Unique Advice number.
DBPADV_SRCACCNO	NOT NULL	NUMBER(20)	Source /Debit Account number.
DBPADV_SRCBIN	NOT NULL	NUMBER(15)	Source/Debit Bank's BIN
DBPADV_SVCACCNO	NOT NULL	NUMBER(20)	Service charge source/Debit account number
DBPADV_SVCBIN	NOT NULL	NUMBER(15)	Service charge source/Debit Bank's BIN
DBPADV_SVCCHARGE	NOT NULL	NUMBER(10)	Service charge amount
DBPADV_TERMID	NOT NULL	NUMBER(5)	Merchant Terminal ID
DBPADV_TERMOPID	NOT NULL	NUMBER(10)	Merchant Terminal Operator ID
DBPADV_TRANNO	NOT NULL	NUMBER	POS transaction number

Table 6-11 : Structure of table DBPOS_ADVICE

Table Name : DBPOS_TRANSACTION
Description : This table is used to keep individual records of Debit POS Transactions.
Primary Key : DBPOSTRAN_NO
Foreign Key : N.A

Name	Null?	Type	Description
DBPOSTRAN_AC	NULL	NUMBER(3)	Action code of authorisation request from C&A to Bank stored for logging.
DBPOSTRAN_AI	NULL	NUMBER(2)	Action Indicator of authorisation request of Terminal
DBPOSTRAN_ARCHFLAG	NOT NULL	CHAR(1)	Default 'N' ('Y' - transaction archived and can be purged)
DBPOSTRAN_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
DBPOSTRAN_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
DBPOSTRAN_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
DBPOSTRAN_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
DBPOSTRAN_CARDNR	NOT NULL	NUMBER(20)	Customer's card number
DBPOSTRAN_CCICC	NULL	VARCHAR2(4)	Last completion code of the cardholder card.
DBPOSTRAN_CCTK	NULL	VARCHAR2(4)	Last completion code of the Terminal Card
DBPOSTRAN_ISO310	NOT NULL	DATE	Customer Card expiry date
DBPOSTRAN_ISO504	NOT NULL	DATE	Transaction date
DBPOSTRAN_ISO505	NOT NULL	NUMBER(4)	Transaction time
DBPOSTRAN_ISO506	NOT NULL	VARCHAR2(12)	Short identifier for card acceptor (New definition - PSAM(4) & 'xx...xx' (8)
DBPOSTRAN_ISO510	NOT NULL	NUMBER(10)	Transaction Amount
DBPOSTRAN_ISO511	NOT NULL	NUMBER(10)	Transaction Amount
DBPOSTRAN_ISO512	NOT NULL	NUMBER(4)	Currency exponent and code as used in POS transaction.
DBPOSTRAN_NO	NOT NULL	NUMBER	Unique Advice number.
DBPOSTRAN_NTICC	NOT NULL	NUMBER(5)	Customer card transaction counter.
DBPOSTRAN_NTTK	NULL	NUMBER(10)	Terminal card transaction counter.
DBPOSTRAN_OUTSTFLAG	NOT NULL	NUMBER(1)	Outstanding flag (0 - Not outstanding / 1- Outstanding)
DBPOSTRAN_POSADVNO	NULL	NUMBER	POS Advice number
DBPOSTRAN_PSAM	NOT NULL	NUMBER(10)	Terminal Card Number
DBPOSTRAN_SVCCHARGE	NOT NULL	NUMBER(10)	Service charge amount
DBPOSTRAN_TE	NULL	NUMBER(2)	Transaction technical error code (stored for logging purpose)
DBPOSTRAN_TXSTATUSCODE	NULL	NUMBER(3)	Transaction status code (stored for logging purpose).
DBPOSTRAN_VKOFF	NOT NULL	VARCHAR2(4)	Off-line keyid and Version
DBPOSTRAN_VKON	NOT NULL	VARCHAR2(4)	On-line keyid and Version

Table 6-12 : Structure of table DBPOS_TRANSACTION

Table Name : DB_ADVICE
Description : This table is used to keep summarised information on Load / Unload Transactions.
Primary Key : DBADV_NO
Foreign Key : DBADV_CUSTTRANSNO (CUST_TRANSACTION.CUSTTRANS_NO)

Name	Null?	Type	Description
DBADV_AMT	NOT NULL	NUMBER(10)	Amount that has been transacted with the customer card for this advice
DBADV_ARCHFLAG	NOT NULL	CHAR(1)	Debit advice archived confirmation: Default: 'N', after archivation changed to 'Y'
DBADV_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
DBADV_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
DBADV_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
DBADV_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
DBADV_BANKCUSTID	NULL	VARCHAR2(20)	Bank specific Customer Id
DBADV_BANKID	NOT NULL	NUMBER(4)	C&A system specific customer Bank Id
DBADV_BINDEST	NOT NULL	NUMBER(15)	BIN of destination account (credited account)
DBADV_BINSRC	NOT NULL	NUMBER(15)	BIN of source account (debited account)
DBADV_BINSVCSRC	NOT NULL	NUMBER(15)	BIN of service charge account (debited account)
DBADV_CUSTCARDNR	NOT NULL	NUMBER(20)	Customer card number for this particular Debit Advice
DBADV_CUSTNAME	NULL	VARCHAR2(30)	Name of the customer whose Debit advice is being generated
DBADV_CUSTTRANSDATETIME	NOT NULL	DATE	Date and Time on which the Customer transaction took place
DBADV_CUSTTRANSNO	NOT NULL	NUMBER	Customer related Transaction No (C&A system specific)
DBADV_DATETIME	NULL	NUMBER(13)	Debit Advice Date and Time of generation
DBADV_DESTACCNO	NULL	NUMBER(20)	The Account where money is to be credited. The Customer Account No. in case of UNLOADING, else the Bank Pool Account No. or cust. ECH acc. number in case of LOADING
DBADV_EXPFLAG	NOT NULL	NUMBER(1)	Flag to indicate whether this debit advice has been exported or not. (Default 0= Not Exported, 1=Exported)
DBADV_IEPECH	NOT NULL	NUMBER(14)	Customer Card IEPECH No
DBADV_IEPTYPE	NOT NULL	NUMBER(2)	Type indicating whether the Debit Advice is for IEP(01) or ECH(02)
DBADV_NO	NOT NULL	NUMBER	Unique Number identifying for each Debit Advice
DBADV_SOURCEACCNO	NULL	NUMBER(20)	The Account from which money is to be debited. The Bank pool Account No. or ECH Account Number in case of UNLOADING, else the Customer account No. or Bank Cash Account No in case of LOADING.
DBADV_SVCACCNO	NULL	NUMBER(20)	Service Charge Account No from which the amount is to be debited. If bank is paying the charges, this will be the bank service charge account no. else this will be the customer Account number or the bank cash acc. no.
DBADV_SVCCHARGE	NULL	NUMBER(10)	Amount that has been calculated as the service charge (If any) for this customer card and for this advice
DBADV_TERMID	NOT NULL	NUMBER(5)	Unique identifier for the terminal executing the load/unload transaction.
DBADV_TERMOPID	NOT NULL	NUMBER(10)	Unique Terminal Operator Id, which is equal to related Merchant identifier Mrc_Id or Bank identifier 100000 & Bank_Id.
DBADV_TYPE	NOT NULL	NUMBER(2)	Type to indicate whether it is for a LOADING (01) transaction or UNLOADING (02) transaction

Table 6-13 : Structure of table DB_ADVICE

Table Name : ECH_STLADVICE
Description : This table is used to keep ECH transaction records.
Primary Key : ECHSTL_NO
Foreign Key : ECHSTL_PURTRANSNO (PUR_TRANSACTION.PURTRANS_NO)

Name	Null?	Type	Description
ECHSTL_AMT	NOT NULL	NUMBER(10)	Purchase amount that has been transacted with the Merchant for this advice
ECHSTL_ARCHFLAG	NOT NULL	CHAR(1)	ECH settlement archived confirmation: Default: 'N', after archivation changed to 'Y'
ECHSTL_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
ECHSTL_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
ECHSTL_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
ECHSTL_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
ECHSTL_BANKCUSTID	NULL	VARCHAR2(20)	Bank specific customer Id (if not available, source acc. no must be set)
ECHSTL_DATETIME	NOT NULL	NUMBER(13)	Settlement advice generation Date and Time
ECHSTL_ECHACCNO	NULL	NUMBER(20)	Source account from where the money is to be Debited (Bank ECH Account number of the customer Bank; if not available BankCustId must be set)
ECHSTL_ECHSRCBIN	NOT NULL	NUMBER(15)	BIN of the card holders bank
ECHSTL_EXPFLAG	NOT NULL	NUMBER(1)	Flag to Indicate whether this advice has been exported or not. Default 0
ECHSTL_MRCACCNO	NOT NULL	NUMBER(20)	Destination account where the money is to be credited (Bank Account number of the Merchant)
ECHSTL_MRCBIN	NOT NULL	NUMBER(15)	Merchant Bank Id for ECH settlement
ECHSTL_MRCID	NOT NULL	NUMBER(20)	Merchant Id for this Credit Settlement Advice
ECHSTL_MRCNAME	NOT NULL	VARCHAR2(30)	Merchant whose credit settlement advice is being generated
ECHSTL_NC	NULL	NUMBER(5)	Terminal Card reconciliation counter
ECHSTL_NI	NULL	NUMBER(5)	Transaction Counter
ECHSTL_NO	NOT NULL	NUMBER	Unique Number identifying for each Credit Settlement Advice
ECHSTL_PURTRANSNO	NOT NULL	NUMBER	The corresponding Purchase transaction for which the Advice is being raised
ECHSTL_SVCACCNO	NULL	NUMBER(20)	Number of the account which is debited with the service account
ECHSTL_SVCBIN	NULL	NUMBER(15)	Identification number of the bank which is debited with the service account
ECHSTL_SVCCHARGE	NULL	NUMBER(10)	Amount that has been calculated as the service charge for this advice
ECHSTL_TERMID	NOT NULL	NUMBER(5)	Unique identifier for a terminal
ECHSTL_TERMOPID	NOT NULL	NUMBER(10)	Unique Terminal Operator Id, which is equal to related Merchant identifier Mrc_Id or Bank identifier 100000 & Bank_Id.

Table 6-14 : Structure of table ECH_STLADVICE

Table Name : GDAID
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
GDAID_AIDICCATM	NOT NULL	VARCHAR2(16)	ATM - Application identifier for ICC
GDAID_AIDICCEP	NOT NULL	VARCHAR2(16)	IEP - Application identifier for ICC
GDAID_AIDICCPoS	NOT NULL	VARCHAR2(16)	POS - Application identifier for ICC
GDAID_AIDICCRFU	NOT NULL	VARCHAR2(16)	RFU - Application identifier for ICC
GDAID_AIDTKATM	NOT NULL	VARCHAR2(16)	ATM - Application identifier for TK
GDAID_AIDTKIEPL	NOT NULL	VARCHAR2(16)	IEPL - Application identifier for TK
GDAID_AIDTKIEPP	NOT NULL	VARCHAR2(16)	IEPP - Application identifier for TK
GDAID_AIDTKPOS	NOT NULL	VARCHAR2(16)	POS - Application identifier for TK
GDAID_AIDTKTERM	NOT NULL	VARCHAR2(16)	TERM - Application identifier for TK
GDAID_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
GDAID_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
GDAID_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
GDAID_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU

Table 6-15 : Structure of table GDAID

Table Name : GDATR
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
GDATR_ATRICCBANK	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Bank authorisation card
GDATR_ATRICCECH	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset ECH only customers card
GDATR_ATRICCEP	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset IEP only customers card
GDATR_ATRICCPoS	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset IEP/ECH + POS customers card
GDATR_ATRPSAM	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Merchant IEP/ECH/POS TK
GDATR_ATRPSAMICC	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Merchant IEP/ECH TK
GDATR_ATRPSAMPOS	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Merchant POS TK
GDATR_ATRTKBANK	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Bank IEP/ECH/POS TK
GDATR_ATRTKBANKIEP	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Bank IEP/ECH TK
GDATR_ATRTKBANKPOS	NOT NULL	VARCHAR2(30)	Data returned in the cards answer to reset Bank POS TK
GDATR_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
GDATR_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
GDATR_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
GDATR_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU

Table 6-16 : Structure of table GDATR

Table Name : GDCARDPAR
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
GDCARDPAR_59PANID	NOT NULL	NUMBER(5)	Bank group identifier (RFU)
GDCARDPAR_ALGIEPPSAM	NOT NULL	VARCHAR2(2)	Cryptographic Algorithm used by Purse (Default = '01')
GDCARDPAR_AMIEPPSAM	NOT NULL	VARCHAR2(2)	Authentication Mode
GDCARDPAR_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
GDCARDPAR_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
GDCARDPAR_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
GDCARDPAR_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
GDCARDPAR_AWS10	NOT NULL	NUMBER(2)	Identifier for card functionality (refer to DD)
GDCARDPAR_FIDEFCERT	NOT NULL	VARCHAR2(4)	FID of ICC file EF_CARDCERT
GDCARDPAR_FIDEFSCN	NOT NULL	VARCHAR2(4)	FID of ICC file EF_STARCOIN
GDCARDPAR_IDCHECKTK	NOT NULL	VARCHAR2(2)	Indicates for which transaction the Merchant Id card must be inserted
GDCARDPAR_IEPPARAM	NOT NULL	VARCHAR2(2)	Parameter indicates locking of the card
GDCARDPAR_ISO307	NOT NULL	NUMBER(5)	Cardholder id sequence number for the current file
GDCARDPAR_ISO403	NULL	NUMBER(3)	Number of performed off-line transactions (Personalised with '00')
GDCARDPAR_ISO407	NULL	NUMBER(10)	Cumulated total off-line amount (personalised with '00 00 00 00')
GDCARDPAR_ISO410	NULL	DATE	Revolving credit cycle begin (personalised with fixed value)
GDCARDPAR_ISO411	NOT NULL	NUMBER(10)	Amount remaining this credit cycle
GDCARDPAR_MAXPIN	NOT NULL	NUMBER(2)	Max. number of PIN retries
GDCARDPAR_PATM	NOT NULL	NUMBER(3)	Phase number ATM (Default = 00, max. = 255)
GDCARDPAR_PFUNCT	NOT NULL	VARCHAR2(4)	Indicator for supported messages (RFU)
GDCARDPAR_PIEP	NOT NULL	NUMBER(3)	Phase Number IEP (Default = 01, max. = 255)
GDCARDPAR_PPOS	NOT NULL	NUMBER(3)	Phase Number POS (Default = 01, max. = 255)
GDCARDPAR_PVERS	NOT NULL	VARCHAR2(4)	HW/SW version of chip mask (RFU)
GDCARDPAR_SECTORID	NOT NULL	NUMBER(2)	Sector Identifier for the Bank (not used in STARCOIN)
GDCARDPAR_UAIEP	NOT NULL	VARCHAR2(2)	Activation status of an IEP

Table 6-17 : Structure of table GDCARDPAR

Table Name : GDCA_PARAMS
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
GDPARAM_ICCPERS	NULL	CHAR(1)	Internally used to control Customer Card information Export
GDPARAM_PARAM1	NOT NULL	VARCHAR2(255)	Important Parameter for System Operation
GDPARAM_PURGEDDATE	NULL	DATE	Date when last purge database process has run.

Table 6-18 : Structure of table GDCA_PARAMS

Table Name : GDSERV
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
GDSERV_SERVICECATEGORY	NOT NULL	NUMBER(1)	Service Category type (1 - Customer card , 2 - Bank Terminal Card , 3 - Purchase terminal card. This category for dynamic controlling of list-box.
GDSERV_SERVICECODE	NOT NULL	NUMBER(5)	Actual service code
GDSERV_SERVICETYPE	NOT NULL	VARCHAR2(15)	Short description of service type (e.g. BSTSAM-POS)

Table 6-19 : Structure of table GDSERV

Table Name : GDSYSPAR
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
GDSYSPAR_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
GDSYSPAR_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
GDSYSPAR_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
GDSYSPAR_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
GDSYSPAR_MAXPOOL	NOT NULL	NUMBER(4)	Maximum number of pools allowed in the System
GDSYSPAR_ORGANISATIONNAME	NOT NULL	VARCHAR2(50)	Name of STARCOIN system provider
GDSYSPAR_PID	NOT NULL	NUMBER(3)	Serial number of the STARCOIN system (Pilot Id - used in CARD_NR, TERM_ID, PP_IIEP, PP_PSAM)
GDSYSPAR_PPIIEP	NOT NULL	NUMBER(6)	Purse Provider associated with IEP and ECH applications CCC = Currency code, PID = Pilot Id number
GDSYSPAR_PPPSAM	NOT NULL	NUMBER(6)	Purse Provider for the Terminal card CCC = Currency code, PID = Pilot Id number

Table 6-20 : Structure of table GDSYSPAR

Table Name : IEPECH
Description : This table is used to keep the purse information of a Customer Card
Primary Key : IEPECH_IEPECH
Foreign Key : IEPECH_CARDNR (CUST_CARD.CUSTCARD_CARDNR)

Name	Null?	Type	Description
IEPECH_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
IEPECH_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
IEPECH_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
IEPECH_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
IEPECH_BALECH	NULL	NUMBER(10)	Topical balance for the ECH in this Card
IEPECH_BALMAXIEPECH	NOT NULL	NUMBER(10)	Maximum holding amount for the IEP/ECH (depending on type of purse)
IEPECH_CARDNR	NOT NULL	NUMBER(20)	Unique Number identifying for the corresponding Customer Card
IEPECH_CURRIEP	NOT NULL	NUMBER(4)	Currency for the IEP/ECH
IEPECH_DACTIEP	NULL	DATE	Date on which the IEP is Activated Defined: Date of ICC personalisation
IEPECH_DDEAIEP	NULL	DATE	Date on which the IEP is deactivated (No more tx allowed, DdealIEP = DEXP_IEP + SysCardPar_DdeaOff). In case of loss, defect, theft and fake of the card, this date is preset in the database.
IEPECH_DELDATE	NULL	DATE	IEPECH deleted date (automatically at DdealIEP)
IEPECH_DELFLAG	NOT NULL	NUMBER(1)	Default '0'. Flag to indicate deleted IEPECH
IEPECH_DEXPIEP	NOT NULL	DATE	Date on which the IEP expires (No more Load allowed)
IEPECH_ECHACCNO	NULL	NUMBER(20)	Account number for the ECH in this Card
IEPECH_IEPECH	NOT NULL	NUMBER(14)	Unique Number identifying for each Electronic purse (Start value is N(PID (Hex) & '00 00 00 01')
IEPECH_LOADAMT	NULL	NUMBER(10)	Total Purse load amount
IEPECH_PIEP	NOT NULL	NUMBER(3)	Phase Number for this Purse (Default = 01)
IEPECH_POOLID	NOT NULL	NUMBER(5)	Pool Identifier associated with this Purse/ECH (derived from IEPECH-->CustCard-->Cust-->Bank-->Pool)
IEPECH_PPIEP	NOT NULL	NUMBER(6)	Purse Provider associated with this Purse
IEPECH_PURAMT	NULL	NUMBER(10)	Total Purse Purchase amount.
IEPECH_PURGEDLOADAMT	NULL	NUMBER(10)	Total purged purse load amount
IEPECH_PURGEDPURAMT	NULL	NUMBER(10)	Total Purged Purchase amount of that purse
IEPECH_PURGEDUNLOADAMT	NULL	NUMBER(10)	Total Purged purse unload amount.
IEPECH_TYPE	NOT NULL	VARCHAR2(3)	Type indicating whether it is an IEP or ECH
IEPECH_UNLOADAMT	NULL	NUMBER(10)	Total purse unload amount.

Table 6-21 : Structure of table IEPECH

Table Name : IEP_STLADVICE
Description : This table is used to keep summarised information on IEP Transactions.
Primary Key : IEPSTL_NO
Foreign Key : N.A

Name	Null?	Type	Description
IEPSTL_AMT	NOT NULL	NUMBER(10)	Amount that has been transacted with the Merchant for this advice
IEPSTL_ARCHFLAG	NOT NULL	CHAR(1)	IEP settlement archived confirmation: Default: 'N', after archivation changed to 'Y'
IEPSTL_ATTRIBUTE1	NULL	VARCHAR2(255)	Reserved for future use
IEPSTL_ATTRIBUTE2	NULL	VARCHAR2(255)	Reserved for future use
IEPSTL_ATTRIBUTE3	NULL	VARCHAR2(255)	Reserved for future use
IEPSTL_ATTRIBUTE4	NULL	VARCHAR2(255)	Reserved for future use
IEPSTL_DATE	NOT NULL	NUMBER(13)	Credit Settlement Advice Date
IEPSTL_EXPFLAG	NOT NULL	NUMBER(1)	Flag to Indicate whether this advice has been exported or not
IEPSTL_MRCACCNO	NOT NULL	NUMBER(20)	Destination account where the money is to be credited (Bank Account number of the Merchant)
IEPSTL_MRCBIN	NOT NULL	NUMBER(15)	Merchant Bank Id for IEP settlement
IEPSTL_MRCID	NOT NULL	NUMBER(20)	Merchant identification number for this credit settlement Advice
IEPSTL_MRCNAME	NOT NULL	VARCHAR2(30)	Merchant Id for the Merchant whose credit settlement advice is being generated
IEPSTL_NC	NULL	NUMBER(5)	Terminal Card reconciliation counter
IEPSTL_NI	NULL	NUMBER(5)	Transaction Counter
IEPSTL_NO	NOT NULL	NUMBER	Unique Number identifying for each Credit settlement Advice
IEPSTL_SRCPOOLACCNO	NOT NULL	NUMBER(20)	Source account from where the money is to be Debited (Bank Pool Account number of the customer Bank)
IEPSTL_SRCPOOLBIN	NOT NULL	NUMBER(15)	Bank Id number from where the money is to be Debited (BIN of Bank Pool of the customer bank)
IEPSTL_SVCACCNO	NULL	NUMBER(20)	Number of the account which is debited with the service charge
IEPSTL_SVCBIN	NULL	NUMBER(15)	Identification number of the bank which service account is debited
IEPSTL_SVCCHARGE	NULL	NUMBER(10)	Amount that has been calculated as the service charge for this Merchant and for this advice

Table 6-22 : Structure of table IEP_STLADVICE

Table Name : KEY_VERSION
Description : This table keeps information on Keys
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
KEY_ACTDATE	NULL	DATE	Activation Date of the key
KEY_ACTVERSION	NOT NULL	NUMBER(3)	Currently topical version of the key (max. 255)
KEY_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
KEY_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
KEY_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
KEY_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
KEY_DEACTDATE	NULL	DATE	Deactivation Date of the key
KEY_DELDATE	NULL	DATE	Deleted Date of the key
KEY_DELFLAG	NOT NULL	NUMBER(1)	Deleted Flag for the key
KEY_DERBASE	NULL	VARCHAR2(16)	Derivation base to obtain derived keys
KEY_EXPDATE	NULL	DATE	Expiry date of the key if the key is of expiry_date type
KEY_ID	NOT NULL	VARCHAR2(2)	Key usage Identifier
KEY_KEY	NULL	VARCHAR2(32)	Encrypted value of used key
KEY_LMKVAR	NULL	NUMBER(2)	Variant of key encryption key
KEY_NAME	NOT NULL	VARCHAR2(30)	Name of the Key
KEY_PADDING	NULL	VARCHAR2(4)	Padding required to form the key identifier string
KEY_PURPOSE	NULL	VARCHAR2(8)	Purpose of the Key
KEY_TYPE	NULL	VARCHAR2(2)	Indicates the type of key
KEY_VERSION	NULL	NUMBER(3)	Version of the key

Table 6-23 : Structure of table KEY_VERSION

Table Name : MERCHANT
Description : This table keeps Merchant information
Primary Key : MRC_ID
Foreign Key : N.A

Name	Null?	Type	Description
MRC_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
MRC_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
MRC_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
MRC_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
MRC_CITY	NULL	VARCHAR2(30)	City part of Address for the Merchant
MRC_CONTACTPERSON	NULL	VARCHAR2(30)	Contact Person for the Merchant
MRC_COUNTRY	NULL	VARCHAR2(30)	Country where merchant is located
MRC_DELDATE	NULL	DATE	Merchant deleted date
MRC_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag to indicate deleted Merchant
MRC_FAX	NULL	VARCHAR2(30)	Fax number of the merchant
MRC_ID	NOT NULL	NUMBER(20)	Unique identifier for each Merchant (please note: relation to TrmCard_OpId, therefore max. value defined)
MRC_NAME	NOT NULL	VARCHAR2(30)	The name of the Merchant
MRC_STREET	NULL	VARCHAR2(30)	Street part of Address for the Merchant
MRC_TELEFON	NULL	VARCHAR2(30)	Telephone No. for the Merchant
MRC_ZIP	NULL	VARCHAR2(30)	ZIP Code part of Address for the Merchant

Table 6-24: Structure of table MERCHANT

Table Name : MRC_ACCBAL
Description : This table keeps Merchant Bank and Account No.wise cumulated ECH, Pool and POS Transaction amount
Primary Key : MRCACCBAL_MRCID
MRCACCBAL_ACCNO
MRCACCBAL_MRCBANKID
Foreign Key : N.A

Name	Null?	Type	Description
MRCACCBAL_ACCNO	NOT NULL	NUMBER(20)	Merchant's Bank Account number
MRCACCBAL_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
MRCACCBAL_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
MRCACCBAL_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
MRCACCBAL_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
MRCACCBAL_DBPOSAMT	NOT NULL	NUMBER(10)	Total DBPOS transaction amount.
MRCACCBAL_ECHAMT	NOT NULL	NUMBER(10)	Total ECH amount of that account.
MRCACCBAL_MRCBANKID	NOT NULL	NUMBER(4)	Merchant's Bank Id.
MRCACCBAL_MRCID	NOT NULL	NUMBER(20)	Merchant Id
MRCACCBAL_PURGEDDBPOSAMT	NOT NULL	NUMBER(10)	Total purged DBPOS amount.
MRCACCBAL_PURGEDECHAMT	NOT NULL	NUMBER(10)	Total purged ECH amount.
MRCACCBAL_PURGEDPOOLAMT	NOT NULL	NUMBER(10)	Total purged IEP amount.
MRCACCBAL_PURGEDSVCAMT	NOT NULL	NUMBER(10)	Total purged Service charge amount.
MRCACCBAL_PURPOOLAMT	NOT NULL	NUMBER(10)	Total IEP amount for that account.
MRCACCBAL_SVCAMT	NOT NULL	NUMBER(10)	Total Service charge paid from that account.

Table 6-25 : Structure of table MRC_ACCBAL

Table Name : MRC_POOL
Description : This table keeps terminal cardwise cumulated pool information
Primary Key : MRCPOOL_MRCID
MRCPOOL_PSAM
MRCPOOL_POOLID
Foreign Key : MRCPOOL_MRCID (MERCHANT.MRC_ID)
MRCPOOL_PSAM (TRM_CARD.TRMCARD_PSAM)
MRCPOOL_POOLID (BANK_POOL.BANKPOOL_POOLID)

Name	Null?	Type	Description
MRCPOOL_LASTSTLAMT	NULL	NUMBER(10)	Total amount in the pool that was last used for settlement advices
MRCPOOL_MRCID	NOT NULL	NUMBER(20)	Unique Identifier for the Merchant associated with the pool number
MRCPOOL_POOLID	NOT NULL	NUMBER(5)	Unique identifier for each Merchant pool
MRCPOOL_PSAM	NOT NULL	NUMBER(10)	Terminal card number of merchant terminal on which these pool amounts are settled
MRCPOOL_TM	NULL	NUMBER(15)	Current Cumulative amount for the Merchant in that pool

Table 6-26 : Structure of table MRC_POOL

Table Name : PENDING_NC
Description : This table is used to keep information on pending transaction records
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
PENDNC_NC	NOT NULL	NUMBER(5)	NC of the transfer file which is pending and for which resend request has been sent.
PENDNC_PSAM	NOT NULL	NUMBER(10)	Transfer File PSAM for which NCs are pending and resend request has been sent.
PENDNC_TERMINALID	NOT NULL	NUMBER(20)	Transfer File Terminal Id for which NCs are pending and resend request has been sent.

Table 6-27 : Structure of table PENDING_NC

Table Name : PUR_TRANSACTION
Description : This table keeps summarised information on purchase transactions
Primary Key : PURTRANS_NO
Foreign Key : PURTRANS_IEPECH (IEPECH.IEPECH_IEPECH)
PURTRANS_PSAM (TRM_CARD.TRMCARD_PSAM)

Name	Null?	Type	Description
PURTRANS_ARCHFLAG	NOT NULL	CHAR(1)	Purchase transaction archived confirmation: Default: 'N', after archivation changed to 'Y'
PURTRANS_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
PURTRANS_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
PURTRANS_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
PURTRANS_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
PURTRANS_CCICC	NULL	VARCHAR2(4)	Last completion code of the cardholder card.
PURTRANS_CCTK	NULL	VARCHAR2(4)	Last completion code of the Terminal Card
PURTRANS_CRITICAL	NOT NULL	NUMBER(1)	Tx could not be settled due to ts/signature/other errors 0 - Not critical , 1 - Critical (Error in transaction)
PURTRANS_DEXIEP		DATE	Date on which the IEP or ECH Expires.
PURTRANS_ECHSTLNO		NUMBER	ECH settlement advice no indicating whether this transaction has been advised or not
PURTRANS_IEPECH	NOT NULL	NUMBER(14)	Customer card/IEP/ECH number for this particular transaction
PURTRANS_MRCPOOLID		NUMBER(5)	Pool Identifier corresponding to this transaction
PURTRANS_MTOTPSAM	NOT NULL	NUMBER(10)	Amount that has been transacted with the customer card
PURTRANS_NC	NULL	NUMBER(5)	Terminal Card reconciliation counter
PURTRANS_NI	NULL	NUMBER(5)	Transaction Counter
PURTRANS_NO	NOT NULL	NUMBER	Unique Number identifying for each Customer Transaction
PURTRANS_NTICC	NOT NULL	NUMBER(5)	Transaction Number for the Customer Card
PURTRANS_NTTK	NOT NULL	NUMBER(10)	Transaction Number for the Terminal Card
PURTRANS_PPIEP	NOT NULL	NUMBER(6)	Purse Provider for the IEP/ECH for this particular transaction
PURTRANS_PSAM	NOT NULL	NUMBER(10)	Purchase Terminal card number where this transaction happened
PURTRANS_TRANSFERDATE	NOT NULL	DATE	Transfer date of transactions for which this settlement is done (one settlement per transfer date)
PURTRANS_TYPE	NOT NULL	NUMBER(2)	Type of Transaction, IEP or ECH
PURTRANS_VKOFF	NOT NULL	NUMBER(5)	Key identifier and Version Number for Off-line transaction
PURTRANS_VKON	NOT NULL	NUMBER(5)	Key identifier and Version Number for On-line transaction

Table 6-28 : Structure of table PUR_TRANSACTION

Table Name : REDLIST_CARDS
Description : This table is used to keep information of Redlisted Cards
Primary Key : REDLIST_NR
Foreign Key : N.A

Name	Null?	Type	Description
REDLIST_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
REDLIST_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
REDLIST_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
REDLIST_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
REDLIST_CARDNR	NOT NULL	NUMBER(20)	Card number redlisted or resetted from Redlist.
REDLIST_DATE	NOT NULL	DATE	Date of Redlist generation
REDLIST_NR	NOT NULL	NUMBER(5)	Unique redlist generation number
REDLIST_REDRESETFLAG	NOT NULL	NUMBER(1)	Reset flag (0 - Redlisted card / 1 - Resetted from redlist)
REDLIST_STATUSDATE	NULL	DATE	Card status date.

Table 6-29 : Structure of table REDLIST_CARDS

Table Name : SYSADM_CODES
Description : This table is used for internal processing
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
COD_CODEDESC	NOT NULL	VARCHAR2(20)	Code type
COD_CODETYPE	NOT NULL	VARCHAR2(30)	Code value
COD_CODEVALUE	NOT NULL	NUMBER(5)	Code description

Table 6-30 : Structure of table SYSADM_CODES

Table Name : SYSADM_ERRORS
Description : This table is used to keep all the application level errors
Primary Key : ERROR_ID
Foreign Key : N.A

Name	Null?	Type	Description
ERROR_ACTION	NULL	VARCHAR2(160)	Action to be taken
ERROR_CAUSE	NULL	VARCHAR2(160)	Cause for Error/Warning
ERROR_ID	NOT NULL	VARCHAR2(80)	Unique Identifier for each Error/Warnings/Informations
ERROR_TXT	NOT NULL	VARCHAR2(80)	Error/Warning/Informative Message

Table 6-31 : Structure of table SYSADM_ERRORS

Table Name : SYSADM_ITEMS
Description : This table is used to keep all the menu items of the application
Primary Key : ITEM_ID
Foreign Key : N.A

Name	Null?	Type	Description
ITEM_DESC	NOT NULL	VARCHAR2(50)	Menu Item Description
ITEM_ID	NOT NULL	VARCHAR2(8)	Unique Identifier for each Menu Item Id
ITEM_LABEL	NOT NULL	VARCHAR2(30)	Menu Item Label
ITEM_PROG_ID	NULL	VARCHAR2(60)	Customer Program IdMenu Path
ITEM_TYPE	NOT NULL	CHAR(1)	Menu Item Type

Table 6-32 : Structure of table SYSADM_ITEMS

Table Name : SYSADM_ROLES
Description : This table keeps role information for different users
Primary Key : ROLE_ID
Foreign Key : N.A

Name	Null?	Type	Description
ROLE_CREATEDBY	NOT NULL	VARCHAR2(6)	User Id of the Role Creator
ROLE_CREATIONDATE	NOT NULL	DATE	Role Creation Date
ROLE_DELDATE	NULL	DATE	Role Deleted Date
ROLE_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag to indicate whether the Role has been deleted
ROLE_EXPDATE	NULL	DATE	Date on which the Role Expires
ROLE_ID	NOT NULL	VARCHAR2(10)	Unique Identifier for a Role
ROLE_NAME	NOT NULL	VARCHAR2(30)	Role Name

Table 6-33 : Structure of table SYSADM_ROLES

Table Name : SYSADM_ROLE_ITEMS
Description : This table keeps rolewise item information.
Primary Key : RLITM_ITEMID
 RLITM_ROLEID
Foreign Key : RLITM_ITEMID (SYSADM_ITEMS.ITEM_ID)
 RLITM_ROLEID (SYSADM_ROLES.ROLE_ID)

Name	Null?	Type	Description
RLITM_CREATED_BY	NOT NULL	VARCHAR2(6)	Role Item creation date
RLITM_CREATED_DATE	NOT NULL	DATE	User Id of the Role Item Creator
RLITM_ITEMID	NOT NULL	VARCHAR2(8)	Unique Identifier for each Menu Item Id
RLITM_ROLEID	NOT NULL	VARCHAR2(10)	Unique Identifier for each Role Id

Table 6-34 : Structure of table SYSADM_ROLE_ITEMS

Table Name : SYSADM_USERS
Description : This table keeps all the users' information
Primary Key : USER_ID
Foreign Key : USER_ROLEID (SYSADM_ROLES.ROLE_ID)

Name	Null?	Type	Description
USER_CREATEDATE	NOT NULL	DATE	User creation date
USER_CREATEDBY	NOT NULL	VARCHAR2(6)	User id of the User Creator
USER_DELDATE	NULL	DATE	User deletion date
USER_DELFLAG	NOT NULL	NUMBER(1)	Default 0 Flag to indicate whether the user has been deleted
USER_DESIG	NULL	VARCHAR2(30)	Designation of the User
USER_ID	NOT NULL	VARCHAR2(6)	Unique Identifier for a User
USER_NAME	NOT NULL	VARCHAR2(30)	Name of the User
USER_PASSWDEXPDATE	NULL	DATE	Password expiry date
USER_PASSWORD	NOT NULL	VARCHAR2(10)	Password for the User
USER_ROLEID	NOT NULL	VARCHAR2(10)	Role assigned to the user

Table 6-35 : Structure of table SYSADM_ROLES

Table Name : SYSCARDPAR
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
SYSCARDPAR_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSCARDPAR_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSCARDPAR_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSCARDPAR_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSCARDPAR_AUTHLIMIT	NOT NULL	NUMBER(10)	On-line/Off-line authorisation limit (above this limit an on-line load authorisation of the issuing bank is required) Must be check at any load request
SYSCARDPAR_BALMAXECH	NOT NULL	NUMBER(10)	Maximum holding amount for the ECH
SYSCARDPAR_BALMAXIEP	NOT NULL	NUMBER(10)	Maximum holding amount for the IEP
SYSCARDPAR_CARDNRSTART	NOT NULL	NUMBER(13)	System provider defined part of the Start value for the unique Number identifying for each Customer Card. Resulting start value for system counter CustCard_CardNr is then: 0000 & PID (3) & N(13) (PID comes through G&D init table)
SYSCARDPAR_CURRIEP	NOT NULL	NUMBER(4)	Currency used in the STARCOIN system 1. nibble: minor unit 2.-4. nibble: Currency code (Base currency of the STARCOIN system = nat. curr.)
SYSCARDPAR_DDEAOFF	NOT NULL	NUMBER(3)	ICC and terminal card deactivation date offset in days (to DEXP_IEP/TK) indicating the time transactions are still cleared)
SYSCARDPAR_DEXP IEP	NOT NULL	DATE	Date on which the IEP or ECH expires (Unload and purchase denied)
SYSCARDPAR_ISO305INIT	NOT NULL	NUMBER(2)	The flag determining whether the Cardholders ID (305) contains issuer id or not .If the value is 1 then the ISSUERID field has to be not null.
SYSCARDPAR_ISO310	NOT NULL	DATE	Date on which the Customer card POS functionality expires (load process denied)
SYSCARDPAR_ISSUERID	NULL	NUMBER(2)	Issuer Id for ISO305
SYSCARDPAR_MINLOADAMT		NUMBER(10)	Minimum Load Amount allowed for Customer Card
SYSCARDPAR_PINCHANGE	NOT NULL	NUMBER(1)	PIN change allowed indicator ('00' no, '01' yes, Button in C&A system)

Table 6-36 : Structure of table SYSCARDPAR

Table Name : SYSISOPARATM

Description : This table is used to keep information on system parameters for ATM transactions, set up during installation time

Primary Key : N.A

Foreign Key : N.A

Name	Null?	Type	Description
SYSISOATM_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSISOATM_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSISOATM_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSISOATM_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSISOATM_AUTHCNTR	NOT NULL	NUMBER(6)	Unique serial number of ATM authorisation sequence.
SYSISOATM_ISO401ICC	NOT NULL	NUMBER(10)	On-line/off-line floor limit
SYSISOATM_ISO401TK	NOT NULL	NUMBER(10)	On-line/off-line floor limit
SYSISOATM_ISO402	NOT NULL	NUMBER(3)	Max. number of off-line authorisations
SYSISOATM_ISO404	NOT NULL	NUMBER(5)	Max. days off-line
SYSISOATM_ISO406	NOT NULL	NUMBER(10)	Max. total off-line amount
SYSISOATM_ISO406TERM	NOT NULL	NUMBER(10)	Max. total off-line amount for terminal use
SYSISOATM_ISO408	NOT NULL	NUMBER(10)	Revolving credit cycle limit
SYSISOATM_ISO409	NOT NULL	NUMBER(3)	Revolving credit cycle length

Table 6-37 : Structure of table SYSISOPARATM

Table Name : SYSISOPARPOS

Description : This table is used to keep information on system parameters for POS transactions, set up during installation time

Primary Key : N.A

Foreign Key : N.A

Name	Null?	Type	Description
SYSISOPOS_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSISOPOS_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSISOPOS_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSISOPOS_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSISOPOS_AUTHCNTR	NOT NULL	NUMBER(6)	Unique serial number of POS authorisation sequence.
SYSISOPOS_IEPOSSWITCH	NOT NULL	NUMBER(10)	Threshold value of proposed service (IEP/ECH or POS).If IEP or ECH balances are sufficient.
SYSISOPOS_ISO401ICC	NOT NULL	NUMBER(10)	On-line/off-line floor limit
SYSISOPOS_ISO401TK	NOT NULL	NUMBER(10)	On-line/off-line floor limit
SYSISOPOS_ISO402	NOT NULL	NUMBER(3)	Max. number of off-line authorisations
SYSISOPOS_ISO404	NOT NULL	NUMBER(5)	Max. days off-line
SYSISOPOS_ISO406	NOT NULL	NUMBER(10)	Max. total off-line amount
SYSISOPOS_ISO406TERM	NOT NULL	NUMBER(10)	Max. total off-line amount for terminal use
SYSISOPOS_ISO408	NOT NULL	NUMBER(10)	Revolving credit cycle limit
SYSISOPOS_ISO409	NOT NULL	NUMBER(3)	Revolving credit cycle length

Table 6-38 : Structure of table SYSISOPARPOS

Table Name : SYSPAR
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
SYSPAR_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSPAR_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSPAR_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSPAR_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSPAR_AUTOSTLJOBNO	NULL	NUMBER	RFU
SYSPAR_STLBANKACC	NULL	NUMBER(20)	Representing Settlement Bank Account Number.
SYSPAR_STLBANKBIN	NULL	NUMBER(15)	Representing Settlement Bank Bin.
SYSPAR_STLBANKCITY	NULL	VARCHAR2(30)	City part of Address of the Settlement Bank
SYSPAR_STLBANKCONTACTPERSON	NULL	VARCHAR2(30)	Contact Person representing Settlement Bank.
SYSPAR_STLBANKCOUNTRY	NULL	VARCHAR2(30)	Country where Settlement bank is located
SYSPAR_STLBANKFAX	NULL	VARCHAR2(30)	Fax number of the Settlement bank
SYSPAR_STLBANKNAME	NOT NULL	VARCHAR2(30)	Identifier indicating Settlement Bank Name.
SYSPAR_STLBANKPHONE	NULL	VARCHAR2(30)	Identifier indicating Settlement Bank Phone Number.
SYSPAR_STLBANKSTREET	NULL	VARCHAR2(30)	Street part of Address of the Settlement Bank
SYSPAR_STLBANKZIP	NULL	VARCHAR2(30)	Zip Code part of Address of the Settlement Bank
SYSPAR_STLENCTYPE	NOT NULL	NUMBER(1)	Encryption type for settlement export files
SYSPAR_STLPROCESSFLAG	NULL	NUMBER(1)	Mode of Settlement.
SYSPAR_STLTIME	NULL	DATE	Settlement Time

Table 6-39 : Structure of table SYSPAR

Table Name : SYSREDLIST
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
SYSREDLIST_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSREDLIST_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSREDLIST_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSREDLIST_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSREDLIST_GENPERIOD	NOT NULL	NUMBER(3)	Redlist Information generation period.
SYSREDLIST_REDDATE	NOT NULL	DATE	Date of the current redlist
SYSREDLIST_REDLLENGTH	NOT NULL	NUMBER(8)	Length of the current redlist in byte
SYSREDLIST_REDNUMBER	NOT NULL	NUMBER(5)	Number of the current redlist (max. 65535)
SYSREDLIST_UPDATEDDEPTH	NOT NULL	NUMBER(3)	Update Depth of Redlist.
SYSREDLIST_VALIDINTERVAL	NOT NULL	NUMBER(3)	Valid Time Interval for generating Redlist Information.

Table 6-40 : Structure of table SYSREDLIST

Table Name : SYSSVC
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
SYSSVC_MAXCHRG	NOT NULL	NUMBER(10)	Maximum service charge (fixed) .
SYSSVC_MAXLIM	NOT NULL	NUMBER(10)	Transaction amount from which maximum service charge (fixed) is taken .
SYSSVC_MINCHRG	NOT NULL	NUMBER(10)	Minimum service charge (fixed).
SYSSVC_MINLIM	NOT NULL	NUMBER(10)	Transaction amount up to which minimum service charge (fixed) is taken.
SYSSVC_RATE	NOT NULL	NUMBER(5,2)	If the transaction amount is above SysSvc_MinLim and below SysSvc the service charge is calculated upon this rate.
SYSSVC_TYPE	NOT NULL	NUMBER(2)	Type of transaction the service charged is raised for (load/unload acc./cash, IEP-, ECH-purchase).

Table 6-41 : Structure of table SYSSVC

Table Name : SYSTKPAR
Description : This table is used to keep information on system parameters, set up during installation time
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Comment
SYSTKPAR_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSTKPAR_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSTKPAR_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSTKPAR_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSTKPAR_CHECKBAC	NOT NULL	VARCHAR2(8)	Bitmap indicating necessary checks of bank authorisation card
SYSTKPAR_CHECKPIN	NOT NULL	VARCHAR2(8)	Bitmap indicating necessary checks of bank authorisation card PIN
SYSTKPAR_DEXPTK	NOT NULL	DATE	Date on which current generation of terminal cards expires
SYSTKPAR_IEPRECORDING	NOT NULL	NUMBER(1)	Flag indicating IEP Recording.
SYSTKPAR_KEYVERSION	NOT NULL	NUMBER(3)	Showing the topical version of the terminal cards version dependent keys
SYSTKPAR_RSAANFPROB	NOT NULL	NUMBER(3)	RSA Checking Ratio (RFU - 255 = 100%)
SYSTKPAR_SHOWBALANCE	NOT NULL	NUMBER(3)	Show Balance Indicator
SYSTKPAR_SIGNCHECKTK	NOT NULL	NUMBER(3)	Signature check by Terminal Card
SYSTKPAR_SINGLETXLIMIT	NOT NULL	NUMBER(10)	Individual Transaction Recording Limit for IEP purchase transactions.
SYSTKPAR_SINGLETXPROB	NOT NULL	NUMBER(3)	Individual Transaction Recording Ratio for IEP purchase transactions (255 = 100%).

Table 6-42 : Structure of table SYSTKPAR

Table Name : SYSTKUPD
Description : This table is used to keep Terminal Card Update Information.
Primary Key : SYSTKUPD_UPDNO
 SYSTKUPD_UCTVER
Foreign Key : N.A

Name	Null?	Type	Description
SYSTKUPD_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
SYSTKUPD_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
SYSTKUPD_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
SYSTKUPD_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
SYSTKUPD_CLUSTID	NULL	NUMBER(4)	Cluster Id , identifying a group of terminals, of which the terminal cards shall be updated.
SYSTKUPD_DELDATE	NULL	DATE	Delete Date.
SYSTKUPD_DELFLAG	NOT NULL	NUMBER(1)	Delete flag indicating that the TK Update record has been deleted logically.
SYSTKUPD_DESC	NULL	VARCHAR2(255)	Short description, of what is updated with this command.
SYSTKUPD_OPID	NULL	NUMBER(10)	Operator Id, identifying a merchant , who's terminal cards shall be updated.
SYSTKUPD_TERMID	NULL	NUMBER(3)	Terminal Id for a specific terminal of one merchant (then Op_Id must be defined) , of which the terminal card shall be updated.
SYSTKUPD_UCTVER	NOT NULL	NUMBER(3)	Version of the UCT file, which is used to generate the update command.
SYSTKUPD_UPDDATE	NOT NULL	DATE	Date, when this update has been started.
SYSTKUPD_UPDNO	NOT NULL	NUMBER(5)	Number of that update (start value = 50).Incremented by 1 with every new setup update.

Table 6-43 : Structure of table SYSTKUPD

Table Name : TERMINAL
Description : This table is used to keep terminal information
Primary Key : TERM_ID
 TERM_OPID
Foreign Key : TERM_MANFNR (TERM_MANF.MANF_MANFNR)

Name	Null?	Type	Description
TERM_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
TERM_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
TERM_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
TERM_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
TERM_BTID	NULL	NUMBER(6)	C&A system specific number of a bank terminal
TERM_CATEGORY	NOT NULL	NUMBER(2)	Category of the Terminal, whether PURCHASE (01) or BANK(00)
TERM_CLUSTID	NOT NULL	NUMBER(4)	Cluster Id part of the terminal Id. Service provider specific number e.g. according to ISO8583. For bank terminal set to 6010 for BST and 6011 for SST.
TERM_CONFFLAG	NULL	NUMBER(1)	Flag indicating whether the confirmation from this Bank terminal has arrived for the last session
TERM_DELDATE	NOT NULL	DATE	Terminal deleted date
TERM_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag indicating deleted Terminal
TERM_ID	NOT NULL	NUMBER(5)	Unique Number identifying each Terminal, related to Term_OpId. The complete terminal id is build of: Term_OpId & Term_ClustId & Term_Id
TERM_ISO506	NULL	VARCHAR2(12)	Short identifier of card acceptor (Defined by merchant, ASCII - RFU)
TERM_LASTFAULTTYPE	NULL	NUMBER(2)	Type of fault last encountered for this terminal
TERM_LASTSENTREDNUMBER	NULL	NUMBER(5)	Redlist Number finally sent to the Terminal.
TERM_LASTTXDATE	NULL	NUMBER(4)	Last received transaction Id Date received as YDDD and kept as N(4) for this terminal (of type 'Bank' only)
TERM_LASTTXSEQ	NULL	NUMBER(10)	Last received transaction Id sequence number for this terminal (of type 'Bank' only)
TERM_LOCATION	NULL	VARCHAR2(30)	Location of the Terminal
TERM_MANFNR	NOT NULL	NUMBER(3)	Identifier indicating this Terminal's Manufacturer
TERM_MRCBANKACCNO	NULL	NUMBER(20)	Merchant Bank Account No for settlement for this terminal
TERM_MRCBANKID	NULL	NUMBER(4)	Merchant C&A system specific Bank Id for ECH/IEP settlement
TERM_NTCOLL	NULL	NUMBER(10)	Transaction counter of terminal, increased +1 at every reconciliation. single rec. tx, at every reconciliation itself and parameter update of terminal.
TERM_OPID	NOT NULL	NUMBER(10)	Unique Terminal Operator Id, which is equal to related Merchant identifier Mrc_Id or Bank identifier 100000 & Bank_Id.
TERM_REDDATE	NULL	DATE	Date of the redlist last received by terminal
TERM_REDLLENGTH	NOT NULL	NUMBER(8)	Maximum Length of the redlist for this terminal
TERM_REDNUMBER	NULL	NUMBER(5)	Number of the redlist last received by terminal
TERM_SERVICESTATUS	NULL	NUMBER(2)	Status of the Terminal with regard to its operability. (e.g. UNDER REPAIR, ACTIVE, SHUTDOWN etc.)
TERM_SWVERSION	NULL	NUMBER(4)	Version number for the software loaded in the terminal
TERM_TOPSWVESRION	NULL	NUMBER(4)	Terminal Topical Software Version (compare Term_SWVersion)
TERM_TYPE	NULL	VARCHAR2(30)	Type of Terminal (Model Type.)
TERM_TYPERDATATRANSFER	NOT NULL	NUMBER(3)	Type of data transfer for this terminal (only one bit can be set, refer to DD)

Table 6-44 : Structure of table TERMINAL

Table Name : TERM_MANF
Description : This table is used to keep terminal manufacturer's information
Primary Key : MANF_MANFNR
Foreign Key : N.A

Name	Null?	Type	Description
MANF_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
MANF_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
MANF_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
MANF_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
MANF_CITY	NULL	VARCHAR2(30)	City part of the Address of the CA Provider
MANF_CONTACTPERSON	NULL	VARCHAR2(30)	Contact Person for the CA Provider
MANF_COUNTRY	NULL	VARCHAR2(30)	Country where terminal manufacturer is located
MANF_DELDATE	NULL	DATE	Terminal Manufacturer deleted date
MANF_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag indicating whether Manufacturer is deleted
MANF_FAX	NULL	VARCHAR2(30)	Fax number of the terminal manufacturer
MANF_MANFNR	NOT NULL	NUMBER(3)	Unique identifier for this Manufacturer (stored in terminal card)
MANF_NAME	NOT NULL	VARCHAR2(30)	The name of the Manufacturer
MANF_STREET	NULL	VARCHAR2(30)	Street part of the Address of the CA Provider
MANF_TELEFON	NULL	VARCHAR2(30)	The Telephone number of the CA Provider
MANF_ZIP	NULL	VARCHAR2(30)	ZIP Code part of the Address of the CA Provider

Table 6-45 : Structure of table TERM_MANF

Table Name : TRANSFER_FILES
Description : This table is used to keep Transfer File information
Primary Key : N.A
Foreign Key : N.A

Name	Null?	Type	Description
TRANSFILE_ARCHFLAG	NOT NULL	CHAR(1)	Transfer File archived confirmation: Default: 'N', after archivation changed to 'Y'
TRANSFILE_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
TRANSFILE_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
TRANSFILE_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
TRANSFILE_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
TRANSFILE_DATETIME	NOT NULL	DATE	Date and Time in which the transfer file arrived.
TRANSFILE_ID	NOT NULL	NUMBER(37)	Transfer File Id
TRANSFILE_NAME	NOT NULL	VARCHAR2(12)	Name of the transfer file .
TRANSFILE_NC	NOT NULL	NUMBER(5)	Transfer Number of the received transfer file.
TRANSFILE_PSAM	NOT NULL	NUMBER(10)	Terminal Card No. as received in transfer file
TRANSFILE_STATUS	NOT NULL	NUMBER(1)	File Processed status 0 - Processing successful 1 - Processing pending 2 - Processing Error
TRANSFILE_TERMINALID	NOT NULL	NUMBER(20)	Terminal Id received as eight bytes in the transfer file header.

Table 6-46 : Structure of table TRANSFER_FILES

Table Name : TRM_CARD
Description : This table is used to keep terminal card information
Primary Key : TRMCARD_PSAM
Foreign Key : TRMCARD_TERMID (TERMINAL.TERM_ID)
 TRMCARD_TERMOPID (TERMINAL.TERM_OPID)

Name	Null?	Type	Description
TRMCARD_59PANID	NULL	NUMBER(5)	Bitmap indicating necessary checks of bank authorisation card PIN (bank TK only)
TRMCARD_ATTRIBUTE1	NULL	VARCHAR2(255)	RFU
TRMCARD_ATTRIBUTE2	NULL	VARCHAR2(255)	RFU
TRMCARD_ATTRIBUTE3	NULL	VARCHAR2(255)	RFU
TRMCARD_ATTRIBUTE4	NULL	VARCHAR2(255)	RFU
TRMCARD_CHECKBAK	NULL	VARCHAR2(8)	Identifier indicating group sharing for the Bank in 59PAN file (several values: RFU)
TRMCARD_CHECKPIN	NULL	VARCHAR2(8)	Bitmap indicating necessary checks of bank authorisation card (bank TK only)
TRMCARD_DACTTK	NULL	DATE	Activation Date for the Terminal Card Defined: Date of TK personalisation
TRMCARD_DELDATE	NULL	DATE	Terminal Card delete date
TRMCARD_DELFLAG	NOT NULL	NUMBER(1)	Default 0. Flag to indicate deleted Terminal Card
TRMCARD_DEXPTK	NOT NULL	DATE	Date on which the Terminal card expires
TRMCARD_IEPOSSWITCH	NOT NULL	NUMBER(10)	Threshold value for proposed service(IEP or POS)
TRMCARD_ISO401	NOT NULL	NUMBER(10)	On-line/off-line floor limit
TRMCARD_ISO401_TKATM	NULL	NUMBER(10)	ATM floor limit of TK (max. authorised ATM Amount)
TRMCARD_ISO401_TKPOS	NULL	NUMBER(10)	POS floor limit of TK (max. authorised POS Amount)
TRMCARD_ISO506HDR	NULL	VARCHAR2(8)	Terminal ISO506 Header required in Personalisation.
TRMCARD_ISO512	NULL	NUMBER(4)	Currency code
TRMCARD_ISSDATE	NULL	DATE	Terminal Card issue date (date of card setup in database
TRMCARD_KEYVERSION	NOT NULL	NUMBER(3)	Showing the topical version of the terminal card version dependent keys
TRMCARD_LISTSTATUS	NOT NULL	NUMBER(1)	Indicating the topical terminal card list status. Default 0, '0': 'Neither' or red listed '01'
TRMCARD_NEWPSAM	NULL	NUMBER(10)	Indicates new PSAM which REPLACES the existing one
TRMCARD_NTTK	NULL	NUMBER(10)	Last received transaction number for this Terminal Card
TRMCARD_PPPSAM	NOT NULL	NUMBER(6)	Terminal card provider
TRMCARD_PSAM	NOT NULL	NUMBER(10)	Unique Number identifying for each Terminal Card
TRMCARD_RSAANFPROB	NOT NULL	NUMBER(3)	RSA Checking Ratio
TRMCARD_SERVICE	NOT NULL	NUMBER(5)	Requested or Supported service depending on type of card (refer to GMW08_xx.doc)
TRMCARD_SHOWBALANCE	NOT NULL	NUMBER(3)	Show Balance Indicator
TRMCARD_SIGNCHECKTK	NULL	NUMBER(3)	Signature check by Terminal Card
TRMCARD_SINGLETXLIMIT	NOT NULL	NUMBER(10)	Individual Transaction Recording Limit for IEP purchase transactions.
TRMCARD_SINGLETXPROB	NOT NULL	NUMBER(3)	Individual Transaction Recording Ratio for IEP purchase transactions.
TRMCARD_STATUS	NOT NULL	NUMBER(2)	Status of the Card (01 - NEW , 02 - ACTIVE , 15 - RESTRICTED USE , 90 - DEACTIVATED)
TRMCARD_STATUSDATE	NULL	DATE	Date when topical status was set or state reason occurred (e.g. loss, theft,..)
TRMCARD_STATUSREASON	NULL	VARCHAR2(20)	Reason for TK status. Ref your document lifecyc1.doc
TRMCARD_TERMID	NOT NULL	NUMBER(5)	Unique Identifier for the purchase terminal corresponding to the terminal card
TRMCARD_TERMOPID	NOT NULL	NUMBER(10)	Unique Terminal Operator Id, which is equal to related Mrc_Id or 100000 & Bank_Id.
TRMCARD_UPDATETKNO	NULL	NUMBER(5)	Number of TK update
TRMCARD_UPDTKCONFDATE	NULL	DATE	Date ,when last update confirmation has been received.
TRMCARD_UPDTKNCCONF	NULL	NUMBER(5)	TransFile_NC, at the moment the update confirmation has arrived.

TRMCARD_UPDTKSENDDATE	NULL	DATE	Date, when last update command has been sent.
TRMCARD_VKATMOFF	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKATMON	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKIEPLOFF	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKIEPLON	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKIEPPOFF	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKIEPPON	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKPINRESET	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKPOSOFF	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKPOSON	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKRSAMOD	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKRSAPUBLIC	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKRSASECRET	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKUPDENC	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKUPDMAC	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update
TRMCARD_VKUPDSIG	NULL	NUMBER(3)	Contains value of SysTkpar_Keyversion .Required for controlling of TK update

Table 6-47 : Structure of table TERM_CARD

6.3 Appendix G - List of Error Messages

Sl. No.	Error Id	Error Description	Cause
1.	ERR20001	Enter Valid Terminal Manufacturer No	Given Terminal Manufacturer Id is not valid in this context
2.	ERR20002	Enter valid Merchant Id	Given Merchant Id is not valid in this context
3.	ERR20003	Enter valid Terminal Number	Given Terminal No. is not valid in this context
4.	ERR20004	Enter valid Key ID	Given Key Id is not valid in this context
5.	ERR20005	Deactivation Date Should be Greater Than or Equal To	An attempt is made to enter
6.	ERR20006	A Terminal must have a terminal card	An attempt is made to cancel the Terminal Card for a Terminal
7.	ERR20010	Enter valid Merchant ID	Entered Merchant id is not valid in this context.
8.	ERR20011	Activation Date should be greater	An attempt is made to enter the activation

		than or equal to	date less than a specific date.
9.	ERR20012	Activation Date should be less than or equal to	An attempt is made to enter the activation date greater than a specific date.
10.	ERR20013	Terminal Service Status cannot be NULL !	An attempt is made to keep terminal service status as null.
11.	ERR20014	Enter Valid Merchant Bank Id	Given Merchant Bank Id is not valid in this context
12.	ERR20015	Cluster Id For Merchant Terminal cannot be 6010 or 6011	Cluster Id for Merchant Terminal has been entered as 6010 or 6011
13.	ERR20016	Terminal cannot have more than ONE card each of same service	An attempt has been made to enter more than one card for a terminal having same service.
14.	ERR20017	Valid values are 01 and 02	Value entered for Type of Data Transfer is not 01 or 02
15.	ERR20018	Active Trm./Trm. Cards Present For This Merchant. Cannot Delete Merchant Info	An attempt is made to delete merchant information having some terminal issued to that merchant and terminal/terminal card status is active.
16.	ERR20020	Terminal Card is not Deactivated. Terminal cannot be made Shutdown	Terminal is attempted to shut down when corresponding Terminal Card is not deactivated.
17.	ERR20021	Terminal Card Status is not present. Terminal cannot be made Shutdown	Terminal is attempted to shut down when corresponding Terminal Card Status is not entered.
18.	ERR20022	Manufacturer Id not found	Incorrect Manufacturer Id is entered
19.	ERR20023	Bank Id not found	Incorrect Bank Id is entered
20.	ERR20024	Merchant Id not found	Incorrect Merchant Id is entered
21.	ERR30001	From Date Should Be Less Than or Equal to to Date	From Date is greater than To Date
22.	ERR30002	From/ To Date Can Not Be A Future Date	From / To date is greater than current date
23.	ERR30003	Enter valid Terminal Location.	Invalid Terminal Location Entry
24.	ERR30004	Enter valid Terminal Information	Invalid Terminal Information Entry
25.	ERR30005	Enter proper query conditions	Improper query conditions entered
26.	ERR40001	Enter valid Customer Id	Invalid Customer Id Entry
27.	ERR40002	Enter valid Bank ID	Invalid Bank Id Entry
28.	ERR40003	Enter valid Bank Pool ID	Invalid Bank Pool Id Entry
29.	ERR40004	Bank Bin has already been assigned to a Bank	An attempt is made to assign BIN to a bank, which is already assigned to another bank.
30.	ERR40005	Enter valid Date Of Birth	Invalid Date of Birth Entry
31.	ERR40006	Enter valid Card Effective Date	Invalid Card effective date.

32.	ERR40007	Enter valid CA Provider ID	Entered CA provider Id is not valid in this context.
33.	ERR40008	Card not issued , but saved.	Card not issued successfully
34.	ERR40009	Personalisation Of Cards has failed	Personalisation of cards failed
35.	ERR40010	Service Type must be entered	When Service type is left as null.
36.	ERR40013	Card(s) not yet personalised	
37.	ERR40014	Card Effective Date should be before or equal to Expiry Date.	Entered Card effective date is greater than or equal to Expiry date.
38.	ERR40015	IEPECH Expiry Date should be before or equal to Card Expiry Date.	Invalid IEP/ECH Expiry date entered
39.	ERR40016	IEPEH Expiry Date should be equal to or after Card Effective Date.	IEP/ECH expiry date is less than or equal to Card Effective date.
40.	ERR40017	IEPECH Activation Date should be before or equal to IEPECH Expiry Date	Entered IEP/ECH Activation date Greater than IEP/ECH Expiry date.
41.	ERR40018	IEPECH Activation Date should be equal to or after Card Effective Date .	IEPECH Activation Date is less than the Card effective date.
42.	ERR40019	IEPECH Activation Date should be given whenever there is Deactivation Date.	If IEP/ECH deactivation date is there, an attempt is made to leave the IEP/ECH activation date.
43.	ERR40020	IEPECH Deactivation Date should be equal to or after Activation Date.	IEPECH Deactivation date is greater than or equal to Activation date.
44.	ERR40021	IEPEH Deactivation Date should be before or equal IEPECH Expiry Date .	IEPEH Deactivation Date is greater than or equal to IEP/ECH Expiry Date
45.	ERR40023	Do you want to clear the form ?	Some change has been made in some field and Clear button has been pressed
46.	ERR40024	No # made. Card ! is not deleted .	Deletion process unsuccessful.
47.	ERR40025	Date fields are not properly given.	Date fields are not properly given.
48.	ERR40026	Enter Valid Bank Customer Id.	Invalid Bank Customer Id. entry
49.	ERR40027	# must be less or equal to -	Date low is less than <date>
50.	ERR40028	You cannot save a new Bank record with corresponding BankPool deleted.	An attempt is made to insert a new Bank to a deleted Bank Pool.
51.	ERR40029	Card Present For This Customer. Cannot Delete Customer Information	An attempt is made to delete a customer when the card is present
52.	ERR40030	Card POS Limit must be more than 0 for Bank/Pos Card	Card POS Limit is entered less than 0 for Bank/Pos Card

53.	ERR40031	IEPECH Card should have at least an IEP and an ECH purse	An IEPECH Card do not have an IEP and an ECH purse
54.	ERR40032	Bank Customer Id for the Bank # should be unique	When a duplicate Bank Customer ID created.
55.	ERR40033	Bank Specific Clerk Id for the Bank # should be unique	When a duplicate Bank clerk id is created.
56.	ERR40034	Terminal/Terminal Card Or Service Data Not Found. Cannot Continue.	Card services not present in the table GDSERV.
57.	ERR40035	Please Insert Card With Proper Service.	Service type of entered card is invalid in this context.
58.	ERR40036	The Card Setup In The System Does Not Require Debit-POS Functionality #	The card service does not support Debit-POS functionality i.e. the card type is lower than Ver2.2.
59.	ERR40037	Replaced card has not been exported. Export it first.	Attempt has been made to execute any functionality before exporting the replaced cards
60.	ERR40038	From Date/To Date Fields Are Not Properly Entered (Format dd.mm.yyyy)	Format of entered Date value is not proper in this context.
61.	ERR40039	Invalid From Date/To Date Entered	From date and To Date are invalid in this context.
62.	ERR40040	From Date Should Not Be Greater Than System Date Or To Date	From date is greater than the System Date.
63.	ERR40041	Year Should Be Greater Than Zero.	Zero is entered in the place of year in a date field.
64.	ERR40042	Customer Bank A/c. No. should not exceed length 12	Length of entered bank A/c no is greater than 12
65.	ERR40043	No bank can have more than 999 cards in the same customer account	For a specific bank, if an attempt is made to issue 1000th card to a specific customer.
66.	ERR40044	Customer Card No. not entered.	An attempt is made to leave the Customer's Card No field.
67.	ERR40045	ATR Not Correct. Invalid Card Inserted. Insert Proper Card And Continue.	Card of proper type is not inserted.
68.	ERR40046	Manufacturer / Terminal Information Not Found. Cannot Continue.	If not terminal manufacturer information is there, but an attempt is made to issue a terminal.
69.	ERR50001	Customer with this # does not exist	Invalid Customer No. has been entered
70.	ERR50002	This Merchant Id does not exist	Invalid Merchant Id has been entered
71.	ERR50003	There are no transactions for which debit advice has not been raised	An attempt has been made to retrieve transactions for which debit advice has not been raised
72.	ERR50004	Unable to update # table	Unable to update a particular table

73.	ERR50005	All settlement advice for this transfer date have already been raised	No transactions available for a particular date, Settlement Advice can not be raised.
74.	ERR50006	Unable to update ECH Settlement Advice table	Unable to update ECH Settlement Advice table
75.	ERR50007	Unable to update IEP Settlement Advice table	Unable to update IEP Settlement Advice table
76.	ERR50008	There are no transactions made by # for which debit advice has not been raised	An attempt is made to raise Debit Advice against transactions made by #, and all advices have already been raised against those transactions
77.	ERR50009	All settlement advice for #, for this transfer date, have already been raised	An attempt is made to raise Settlement Advice against transactions of <xx>, since all advices have already been raised
78.	ERR50010	There are no # advices to be exported	No advice for <tt> is available to export.
79.	ERR50011	There are no advices to be exported for #	No advice for <tt> is available to export.
80.	ERR50012	# advice sequence no. exceeded. Contact system administrator.	When sequence no. for advice of type <tt> exceeds maximum limit.
81.	ERR50013	This a/c no. does not belong to this bank-customer id	Incorrect a/c no. entered for a particular bank-customer id
82.	ERR50014	All settlement advice have been raised	An attempt has been made to raise a settlement advice when all settlement advice has been raised
83.	ERR50015	All settlement advice for # have already been raised	An attempt has been made to raise a settlement advice when all settlement advice has been raised
84.	ERR50016	There are no transactions made by # on this transfer date	An attempt has been made to retrieve transaction where none exist
85.	ERR50017	There are no transactions on this transfer date	An attempt has been made to retrieve transaction where none exist
86.	ERR50018	Export file for this date is already present. Cannot Advice/Export again	Attempt has been made to Advice/Export when export file already exist for this date.
87.	ERR60001	# does not exist or Invalid Character Set . Enter valid # .	Invalid entry
88.	ERR60002	# has no Cash A/c Number. Cannot attach bank .	A bank having no Cash A/c Number is attempted to attach to a pool
89.	ERR60003	Pool A/c No cannot exist without BankId. Cannot Save.	Pool A/c No is given and attempted to save when Bank Id does not exist
90.	ERR60004	Service A/c No. is mandatory for this Service Code	Service Code is given and attempted to save when Service A/c No does not exist

91.	ERR60005	Total No of Pools has exceeded the Max Pool No. Cannot create/generate new Pool.	A new pool is attempted to create when Total No of Pools has exceeded the Max Pool No
92.	ERR60006	Bank Id cannot exist without Pool A/c No. Cannot Save.	Bank Id is given and attempted to save when Pool A/c No does not exist
93.	ERR60007	PoolBank already exists for another Pool. Cannot Save.	Attempted to save record for pool when pool-bank already exist.
94.	ERR60008	An ECH Pool cannot Have an Participating Bank Attached To It.	An attempt is made to attach a Bank with ECH Pool(32769).
95.	ERR60009	Pool Bank Must Have A Cash Account Number.	An attempt is made to define a bank without Cash A/c no as a pool bank.
96.	ERR60010	The Member Bank Of The Pool Must Have A Cash Account Number.	An attempt is made to attach a bank (for which Cash a/c no. is null) in a pool
97.	ERR70001	Key Already Installed, go through reinstallation option	Attempted to install an already installed key
98.	ERR70002	Please enter	For entering in a field
99.	ERR70003	Expiry date should be	Incorrect expiry date
100.	ERR70004	Key Version should be	Incorrect key version
101.	ERR70005	Key is not yet installed !	Attempt to work with a key which have not been installed
102.	ERR70006	Key Not Found in Database. Cannot update Records	Record for a specific key is not present in database, but an attempt is made to Update Topical Version, etc .
103.	ERR70007	Key Not Found in Database. Cannot Add New Instance	Record for a specific key is not present in database, but an attempt is made to Add New Key Instance, etc .
104.	ERR80051	# File not found	File is not found
105.	ERR80052	# must contain digits lying between 0 and 9 only.	Characters are entered in a field which must contain digits
106.	ERR80053	Please Provide File Name (with full Path)	File Name has not been entered properly
107.	ERR80054	File already used, valid transactions are already posted	Attempt to access a file which has been already used
108.	ERR80055	Please Enter Proper values for all the fields	Incorrect values entered
109.	ERR80056	All Customer Cards Under This Bank Are Personalised And Exported	Export of all sorts of customer cards has success fully done.
110.	ERR80057	Cannot Export More Than 65534 Cards.	When total no. of cards for a Batch export process exceeds 65534.
111.	ERR80058	Invalid Command Line Relation.	Generated Command for export is wrong.

		Cannot Export .	
112.	ERR90001	Invalid Error Code Encountered. Contact DBA.	Error Code(s) in Error master (SYSADM_ERRORS) are either modified or deleted
113.	ERR90002	Duplicate Key Exists For	Duplicate key entry
114.	ERR90003	The system is unable to generate Serial Number for #	Unable to generate serial no. for <nn>
115.	ERR90004	Enter valid User ID	Invalid User Id entry
116.	ERR90005	Enter valid Password	Invalid password entry
117.	ERR90006	Unable To Log In To System after 3 Attempts . Exiting	Log in failed for three successive times. Application quits.
118.	ERR90007	Enter valid Role ID	Invalid Role Id entry
119.	ERR90008	Unable To Open File	Unable To Open File
120.	ERR90009	Version Specific Keys not Loaded	During Key management operation, if the keys of proper version is not loaded.
121.	ERR90010	Do you want to update the data ?	Confirmation message on update.
122.	ERR90011	User Deleted . Contact System Administrator.	An attempt is made to retrieve one deleted User
123.	ERR90012	Role ID is deleted. Contact System Administrator.	An attempt is made to retrieve one deleted Role
124.	ERR90013	No Changes to Save	An attempt is made to save changes when no change is made.
125.	ERR90014	Datafile Directory not specified in Parameter	Datafile Directory not specified in Parameter
126.	ERR90015	Expiry Date Specific Keys not Loaded	During Key management operation, if the keys of proper expiry date is not loaded
127.	ERR90016	Cannot Open UCT Text File .	If the file corresponding to this operation does not exists.
128.	ERR90017	All mandatory fields not entered. Cannot save.	Attempt is made to save without entering some or all of the mandatory fields
129.	ERR90018	Unable to Write in File	Unable to create the flat file.
130.	ERR90019	Menu item entry not present.	Non existence of menu item
131.	ERR90020	Enter User Id without spaces in between	User Id entered with space(s) in between
132.	ERR90021	Password does not match. Re-enter	Invalid Password entry
133.	ERR90022	Duplicate User Id.	Duplicate User Id entry
134.	ERR90023	Enter password without spaces in between	Password entered with spaces in between
135.	ERR90024	Password not entered . Cannot save form	Attempt is made to save keeping password blank
136.	ERR90025	There should be at least one item	Attempt is made to either delete all items

		attached to the Role	for a role.
137.	ERR90026	Password Expired. Cannot Login.	Password expires. Login denied.
138.	ERR90027	Enter Role Id without spaces in between	Role Id entered with spaces in between
139.	ERR90028	Password Expired.	Password Expires
140.	ERR90029	Enter valid old password	Invalid old password entry
141.	ERR90030	User Id must contain at least one character	An attempt is made to leave the user is as null.
142.	ERR90031	Enter Valid Terminal Information	Entered terminal information is invalid in this context.
143.	ERR90032	Enter valid new password	Invalid new password entry
144.	ERR90033	There is at least one User assigned to this Role. So Cannot delete Role.	Attempt is made to delete a role while a user still holds that
145.	ERR90034	You cannot add Menu Items to a deleted Role.	Attempt is made to add menu items to a deleted role.
146.	ERR90035	There is no Role associated with the item(s). Cannot Save.	Attempt is made to insert a new role without any item attached.
147.	ERR90036	You cannot update any attributes of a deleted Role.	Attempt is made to update contents of a deleted role.
148.	ERR90037	Password not confirmed. Cannot save	Attempt is made to save without password confirmation
149.	ERR90038	Password expiry date should be more than	Password Expiry date is less than <date>
150.	ERR90039	This Error ID is already existing. Re-enter new Error Id.	Attempt is made to enter new error with existing error id
151.	ERR90040	This Role is already existing. Please enter new Role Id.	Attempt is made to enter new Role with existing Role Id
152.	ERR90041	Enter valid value	Invalid value entry FOR <XX>
153.	ERR90042	Invalid Bank BIN.	Errors, Warnings & Information Id did not start with ERR, WRN, INF respectively
154.	ERR90043	Error Numbers should be greater than 20000	Entered Error Number is less than 20000
155.	ERR90044	Error Id should be in the format ERR/ WRN/ INF<nnnnn> where nnnnn > 20000	Error Id not in the format ERR/ WRN/ INF<nnnnn> where nnnnn > 20000
156.	ERR90045	Period From cannot be greater than Current Date	Period From greater than Current Date
157.	ERR90046	Period To cannot be greater than Current Date	Period To greater than Current Date
158.	ERR90047	Period From should be less than or equal to Period To	Period From greater than Period To
159.	ERR90048	Invalid hex value.	Invalid hex value is entered

160.	ERR90049	Unable to Generate IEP Pool Id (Max Limit 32767)	Max limit of IEP Pool Id exceeded and new Pool is attempted to create
161.	ERR90050	Invalid account number	Entered A/c no. is invalid in this context.
162.	ERR90051	Enter all the fields in all the screens.	Records have been tried to save when all fields in all the screens have not been entered
163.	ERR90052	Enter unique value for service code, corresponding to each service category.	Duplicate value for service code is entered for different service category
164.	ERR90053	Expiry date of IEP/ECH must be greater than the current date	A date less than the current date is entered for Expiry date of IEP/ECH
165.	ERR90054	Minimum Limit must be less than or equal to the Maximum Limit	The entered value of minimum limit is greater than maximum limit
166.	ERR90055	No Service is available	A service is entered where none is available
167.	ERR90056	Customer Card Expiry date must be greater than the current date	A date less than the current date is entered for Customer Card Expiry date
168.	ERR90057	Expiry Date of Terminal Card Generation must be greater than the current date	A date less than the current date is entered for Expiry date of Terminal Card Generation
169.	ERR90058	Proper value must be entered in all fields	Records have been tried to save when all fields in all the screens have not been entered
170.	ERR90059	Currency Code should contain digits lying between 0 and 9 only	Characters have been entered for Currency Code and attempted to save
171.	ERR90060	Currency Code must be greater than 0	The entered value for Currency Code is 0
172.	ERR90061	Settlement Time must be entered for Automatic mode of Settlement	Settlement Time is not entered for Automatic mode of Settlement
173.	ERR90062	Enter valid Settlement Time	Invalid Settlement Time is entered
174.	ERR90063	Enter valid Menu Item	Invalid Menu Item is entered
175.	ERR90064	Duplicate # A/c No.	Uniqueness of a/c no is violated
176.	ERR90065	Cannot modify this service code, card with this service code exists	Service code is attempted to modify when card exists for that service code
177.	ERR90066	This application can not run in stand alone mode	Attempt is made to run a form from Designer mode and not from menu
178.	ERR90067	No. of Service Types for # should be multiples of three	No. of Service Types entered is not multiple of three
179.	ERR90068	Invalid Service Type entered	Invalid Service Type entered
180.	ERR90069	Enter unique value for Service Type, corresponding to each Service Category	Duplicate value for service type is entered for different service category
181.	ERR90070	Enter valid Confirm Password	Invalid Confirm Password entry

182.	ERR90071	Please enter correct password for confirmation	Incorrect password for confirmation is entered
183.	ERR90072	IEP/ECH Expiry Date must be same as Customer Card Expiry Date.	Entered IEP/ECH Expiry Date is not same as Customer Card Expiry Date.
184.	ERR90073	Minimum Limit, Minimum Charge and Maximum Limit Not Allowed for IEP Purchase	Entry of Minimum Limit, Minimum Charge and Maximum limit , Maximum charge not allowed for IEP transactions.
185.	ERR90074	Settlement of Transactions Pending. Cannot Change Service Charge	Service charge schemes cannot be changed if there are transactions pending to be cleared (Now obsolete)
186.	ERR90075	Bank BIN Must Be of 6 Digit Number.	Bank BIN must be of six digit number(Required only for Avers account checking scheme)
187.	ERR90076	Bank A/c Should be at least 6 Digit and Maximum 14 Digits	Range check of Bank account number required only for Avers account checking scheme.
188.	ERR90077	The Personalisation Export Process is being used by another user. Try Later	Concurrent users are trying to do the same operation.
189.	ERR90078	Terminal Id cannot Exist Without Operator Id.	During terminal information entry if an attempt is made to leave operator id.,.
190.	ERR90079	Terminal Card Update Information Already Exists For Version # .	For a particular terminal card update version the UCT text file already exists.
191.	ERR90080	No Customer Card Found For Updating	An attempt is made to update the Customer card status for which updating is not required.
192.	ERR90081	Invalid File/Path Name.	Given File/Path name does not exist
193.	ERR90082	Invalid File Format.	Invalid file format entered in the screen. Check file format in the hint text.
194.	ERR90083	File and Path Name Required.	File name not given but check box for archiving is checked
195.	ERR90084	File name missing!	Path name without file name given
196.	ERR90090	This is not a valid update depth.	Given Update Depth is not number
197.	ERR90091	Update depth can not be below # .	Given update depth is below default update depth in table sysredlist
198.	ERR90092	Update Depth required.	Update Depth field is null while executing query
199.	ERR90093	Invalid archive directory.	Given directory/path/file non-existent

200.	ERR90094	Archiving and Purging Stopped abnormally! Please check your entries	Archiving/Purging stopped due to some error. Possible error: invalid directory for purging.
201.	ERR90095	Resource used by another user.	Data displayed in the form may have changed by another user.
202.	ERR90100	System Parameters are not correct , contact System Administrator	Incorrect System Parameters are entered
203.	ERR90102	Can not replace . Contact System Administrator .	Attempted to replace when some system error has occurred
204.	ERR90103	Field must be in the Range 0 to ...	Field is entered outside the range
205.	ERR90104	Field must be entered completely	Field is not entered completely
206.	ERR90105	Resource is busy. Please try again	The particular table is already being used by another user when it is attempted to access
207.	ERR90106	Unable to Generate Merchant Id (Max Limit 2147483647)	Max limit of Merchant Id has exceeded and new merchant is tried to insert
208.	ERR90107	Unable to Generate Terminal Id (Max Limit 65535)	Max limit of Terminal Id has exceeded and new Terminal is tried to insert
209.	ERR90108	Unable to Generate Terminal Card Number (Max Limit 4294967295)	Max limit of Terminal Card Number has exceeded and new Terminal Card is tried to insert
210.	ERR90109	Unable to Generate Bank Terminal Id (Max Limit 999999)	Max limit of Bank Terminal Id has exceeded and new Bank Terminal is tried to insert
211.	ERR90110	Unable to generate both Bank Terminal and Terminal Id	Unable to generate both Bank Terminal and Terminal Id
212.	ERR90111	Field must be of the form	Invalid format is give for a particular field
213.	ERR90112	The System is Unable to Generate serial number for Bank Terminal Id	The System is Unable to Generate serial number for Bank Terminal Id
214.	ERR90113	The System is Unable to Generate serial number for Terminal Id	The System is Unable to Generate serial number for Terminal Id
215.	ERR90114	# modified by another user. Cannot save information	The same data is already modified by another user.
216.	ERR90115	Record For Customer # Deleted. Contact System Administrator	Customer information abnormally deleted from the system.
217.	ERR90116	Form Running In Query-only Mode. Cannot Change Database Fields	Change of database fields not allowed when the form is running in query mode.
218.	ERR90117	Key Version of card generation must be higher than #	Key version of the new instance of key should be higher than the version already present in the system.
219.	INF20001	Terminal Card(s) Issued Successfully	Not Applicable
220.	INF20002	Card No. # successfully replaced by	Not Applicable

		Card No. @	
221.	INF20003	A # Terminal can have maximum @ cards each of different service	Not Applicable
222.	INF20004	Card already issued, cannot modify service	Not Applicable
223.	INF20017	There is no Terminal for this # which has card(s) to be @	Not Applicable
224.	INF30001	No Record(s) Retrieved	Not Applicable
225.	INF30002	You cannot delete this manufacturer as detail records exist	Not Applicable
226.	INF30003	There are no customers having an Account in this Bank	Not Applicable
227.	INF30004	From Date Should Be Less Than or Equal to Date	Not Applicable
228.	INF30005	From/ To Date Can Not Be A Future Date	Not Applicable
229.	INF40001	Customer exists for bank . Cannot delete.	Not Applicable
230.	INF40002	CA provider exists for bank . Cannot delete.	Not Applicable
231.	INF40003	Do You Want To Continue Personalisation OF The Terminal Card ?	Not Applicable
232.	INF40003	There is no Card in the system which can be #	Not Applicable
233.	INF40003	There is no Card for the Customer which can be #	Not Applicable
234.	INF40004	Please Insert Terminal Card for Service BSTIEP and Press OK.	Not Applicable
235.	INF40005	Please Insert Terminal Card for Service BSTPOS and Press OK.	Not Applicable
236.	INF40006	Please Insert Terminal Card For Service PSAMIEP and Press OK.	Not Applicable
237.	INF40007	Please Insert Terminal Card of Version 2.2 Or Higher and Press OK.	Not Applicable
238.	INF40008	Personalisation Of Terminal Card Successfully Completed.	Not Applicable
239.	INF40010	Personalisation of Cards has been successful	Not Applicable
240.	INF40030	Card # is replaced	Not Applicable
241.	INF40035	No Bank information exists.	Not Applicable
242.	INF40036	No Cards to Export!	Not Applicable

243.	INF40037	Please Remove Card And Insert Terminal Card of Version V2.2 or Later.	Not Applicable
244.	INF50001	Debit Advice raised	Not Applicable
245.	INF50002	File successfully exported	Not Applicable
246.	INF50003	Debit Advice table updated	Not Applicable
247.	INF50004	Settlement Advice raised	Not Applicable
248.	INF50005	ECH Settlement Advice table updated	Not Applicable
249.	INF50006	IEP Settlement Advice table updated	Not Applicable
250.	INF60001	# Has *. Cannot Detach Bank From The Pool.	Not Applicable
251.	INF60002	Pool-Id Is Not Null. Cannot Generate New Pool	Not Applicable
252.	INF60003	Customer Is Attached To This Bank. Cannot Delete Bank	Not Applicable
253.	INF60004	Merchant Is Attached To This Bank. Cannot Delete Bank	Not Applicable
254.	INF60005	Bank Terminal Is Present. Cannot Delete Bank	Not Applicable
255.	INF60006	This Bank Is The Pool Holding Bank.Cannot Delete Bank.	Not Applicable
256.	INF60007	# Has No Bank(s) Attached To It.	Not Applicable
257.	INF60008	This Bank is attached to a Pool. Cannot delete Bank.	Not Applicable
258.	INF60009	Cannot delete a ECH Pool record .	Not Applicable
259.	INF60010	Bank Name not to be entered without Bank Id !	Not Applicable
260.	INF60012	Select Bank Id from the List.	Not Applicable
261.	INF60013	# exists. Pool not to be deleted !	Not Applicable
262.	INF60014	Bank is attached to this Pool. Cannot delete Pool record !	Not Applicable
263.	INF60015	No record retrieved. Reenter .	Not Applicable
264.	INF60016	All the participating Banks are already attached .Cannot attach.	Not Applicable
265.	INF60017	# is successfully attached to this Pool.	Not Applicable
266.	INF60018	# is detached from this Pool.	Not Applicable
267.	INF60019	Total No. Of Pool has equal the Max Pool Parameter. Cannot Create New Pool	Not Applicable

268.	INF60020	There Is No Bank In The System Which Can Be Made The Pool Bank.	Not Applicable
269.	INF60505	Enter valid Bank Id !	Not Applicable
270.	INF70001	This facility is not allowed for	Not Applicable
271.	INF70002	No Deactivated Version Of This Key Is Available For Deletion	Not Applicable
272.	INF70003	No Deactivated Expiry Date Instance For This Key Is Available For Deletion	Not Applicable
273.	INF70004	The Key(s) are Successfully Deleted.	Not Applicable
274.	INF80001	Record(s) successfully imported	Not Applicable
275.	INF80002	Enter Proper Bank Information .	Not Applicable
276.	INF80053	No Card Information to be Exported.	Not Applicable
277.	INF90001	Query retrieves no records.	Not Applicable
278.	INF90002	No changes to save	Not Applicable
279.	INF90003	Archiving of Transactions is partially successful.	Not Applicable
280.	INF90003	All non-issued card(s) issued.	Not Applicable
281.	INF90003	Card Issued	Not Applicable
282.	INF90004	Archiving of Transactions is successful.	Not Applicable
283.	INF90005	Purging of Archived Transactions partially successful.	Not Applicable
284.	INF90006	Purging of Archived Transactions Successful.	Not Applicable
285.	INF90007	No Transactions available for Purging .	Not Applicable
286.	INF90008	No Transactions available for Archiving	Not Applicable
287.	INF90009	No Transactions exist for the entered period	Not Applicable
288.	INF90010	No information to reset.	Not Applicable
289.	INF90011	Purging of System Log records successful .	Not Applicable
290.	INF90012	No System Log records available for purging .	Not Applicable
291.	INF90013	New Redlist generated successfully	Not Applicable
292.	INF90014	Terminal Card Update Information Already Deleted. Cannot Update .	Not Applicable

293.	INF90014	Archiving and Purging Redlist Data.	Not Applicable
294.	INF90014	Purging Redlist Data without Archiving.	Not Applicable
295.	INF90014	# Redlist and Reset data archived and purged.	Not Applicable
296.	INF90014	# Redlist and Reset data purged without archiving .	Not Applicable
297.	INF90014	Invalid archive directory	Not Applicable
298.	INF90014	Archiving and Purging Stopped abnormally! Please check your entries.	Not Applicable
299.	INF90014	Update depth can not be below #	Not Applicable
300.	INF90014	Enter valid Update Depth	Not Applicable
301.	INF90014	Update Depth required.	Not Applicable
302.	INF90014	Full path not given. Do you want to use current directory ?	Not Applicable
303.	INF90015	Press Query button for new query.	Not Applicable
304.	INF90030	At first record	Not Applicable
305.	INF90031	At last record	Not Applicable
306.	INF90032	MaxPool parameter in Parameter table exceeded , can't create.	Not Applicable
307.	INF90033	Record(s) modified. Save Form	Not Applicable
308.	INF90034	No Change From Previous Redlist Info. Redlist File not Generated	Not Applicable
309.	INF90035	File Name Not Entered. Output File Name Is Default.txt	Not Applicable
310.	WRN00050	TK Update Information Is Deleted For Update No # And UCT Version \$.	Not Applicable
311.	WRN20007	No Terminal is allocated. All Information of the Merchant will be lost !	Not Applicable
312.	WRN20008	No Replacement Card Issued. Cannot delete existing Card.	Not Applicable
313.	WRN20009	No Renew Card Issued. Cannot delete existing Card.	Not Applicable
314.	WRN40001	Do You Want To Clear The Form ?	Not Applicable
315.	WRN40012	There is no Card issued for the customer:	Not Applicable
316.	WRN50001	The advice raised has not been exported. Do you want to # the	Not Applicable

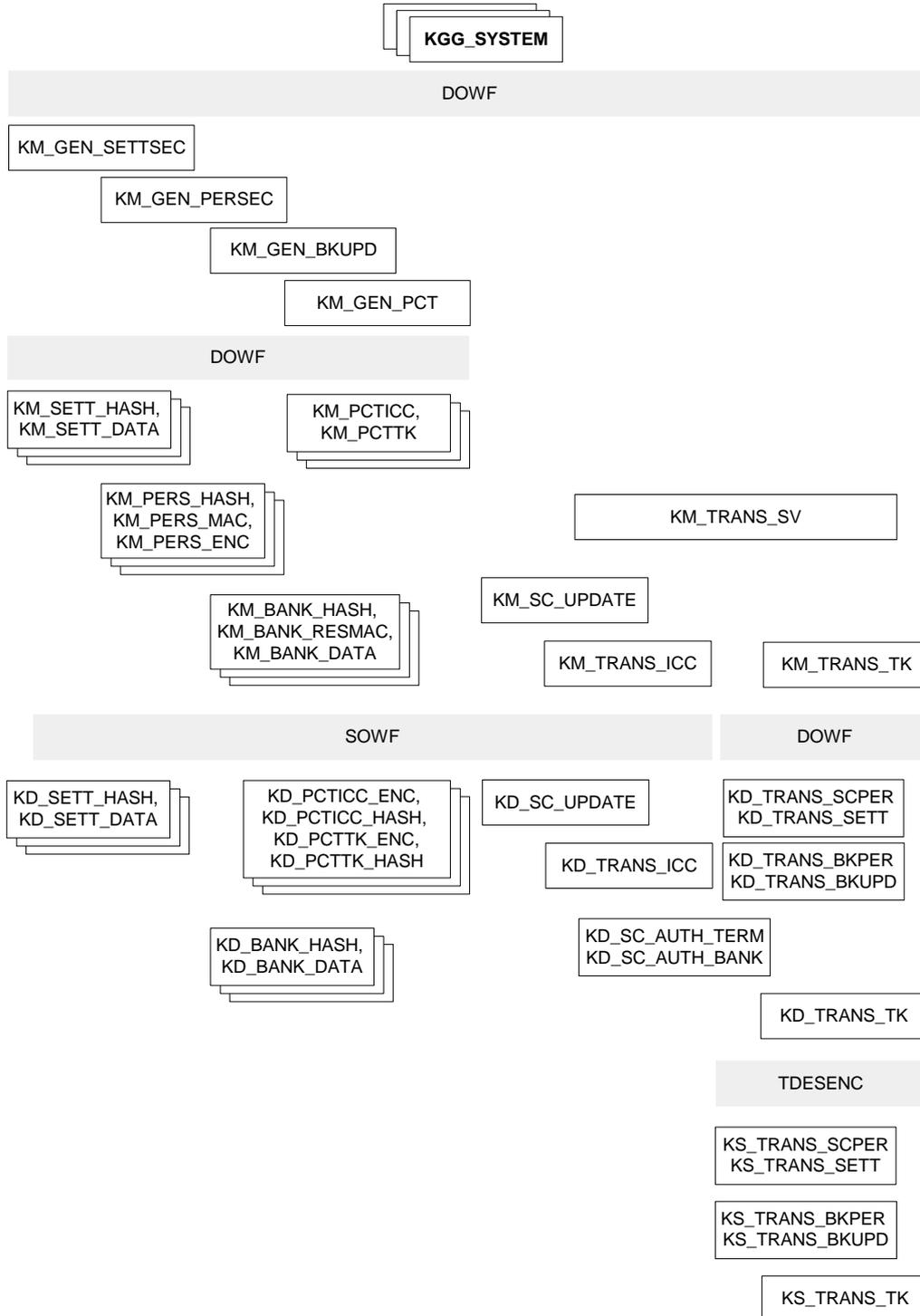
		form ?	
317.	WRN50002	All the # advices will be exported. Do you want to continue ?	Not Applicable
318.	WRN50003	All the advices for # will be exported. Do you want to continue?	Not Applicable
319.	WRN60001	Do you want to abandon this session ?	Not Applicable
320.	WRN60002	Do you want to Clear the Form ?	Not Applicable
321.	WRN60003	Do you want to remove this Bank ?	Not Applicable
322.	WRN70001	This Process Will Delete All Key Data and Install New LMK and Keys.	Not Applicable
323.	WRN80052	Do you really want to Export the file?	Not Applicable
324.	WRN90001	Do you want to clear the screen ?	Not Applicable
325.	WRN90002	Do you want to abandon the change?	Not Applicable
326.	WRN90003	Do you really want to delete the #	Not Applicable
327.	WRN90004	Do you really want to reset the group information to the original values ?	Not Applicable
328.	WRN90005	Do You Want To Delete Update TK Information For UCT Version # ?	Not Applicable
329.	WRN90009	Do you want to save the changes you have made ?	Not Applicable
330.	WRN90015	All Information will be lost ! Continue?	Not Applicable
331.	WRN90016	This process will archive #. Do you want to continue ?	Not Applicable
332.	WRN90017	This process will purge #. Do you want to continue ?	Not Applicable
333.	WRN90020	Card(s) will be # automatically.	Not Applicable
334.	WRN90050	Do you want to abandon the session?	Not Applicable
335.	WRN90051	Do you really want to replace the card ?	Not Applicable
336.	WRN90052	Full path name not given. Will you use current directory ?	Not Applicable
337.	WRN90055	Do you really want to purge records ?	Not Applicable
338.	WRN90055	Do you really want to purge records without archiving ?	Not Applicable

339.	WRN90055	Do you really want to delete user ?	Not Applicable
340.	WRN90101	Do you really want to replace the card ?	Not Applicable
341.	WRN90102	Accounting will get effected. Do you want to continue ?	Not Applicable

Table 6-48 : List of Error/Information/Warning messages

6.4 Appendix H - Key relations

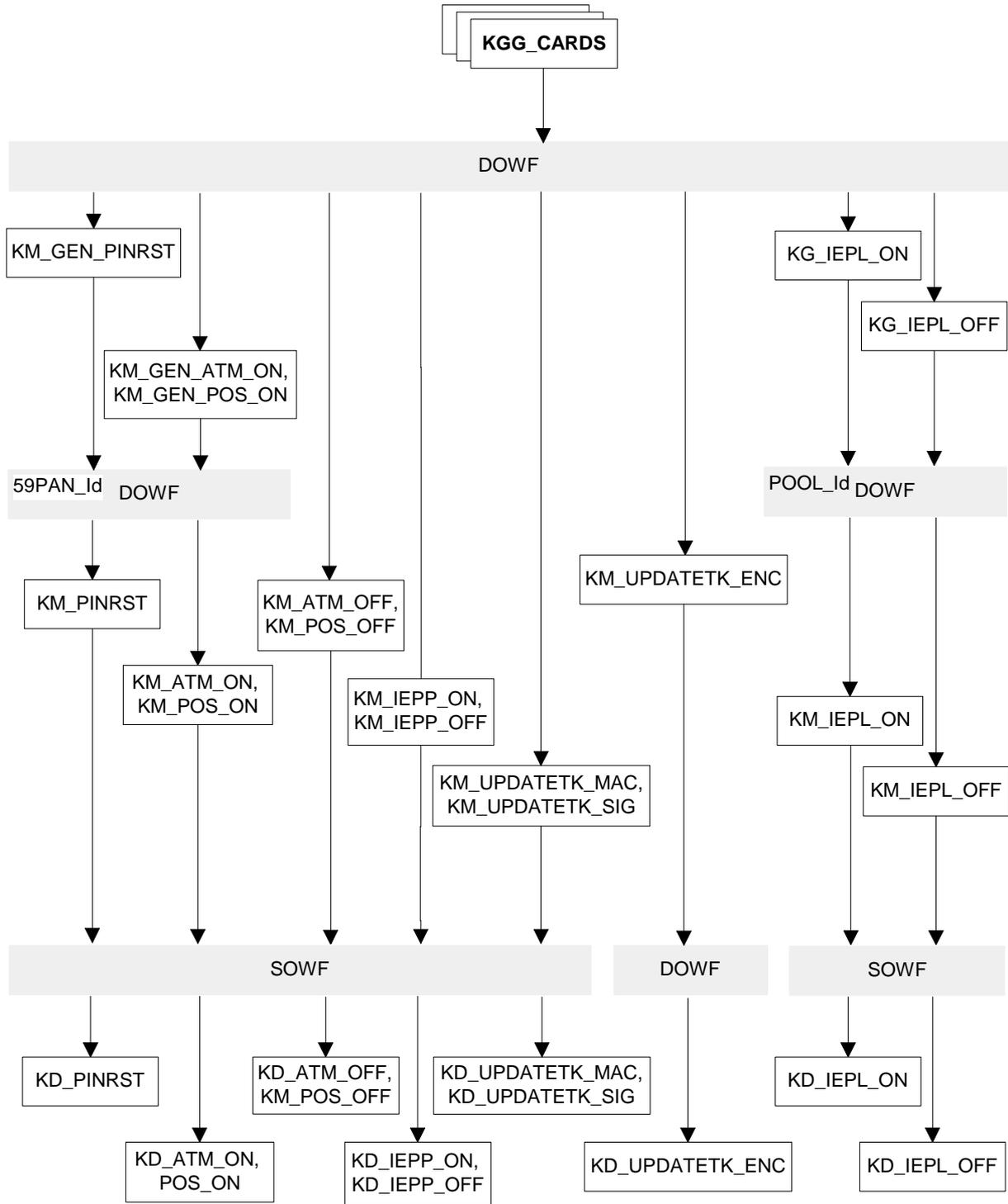
6.4.1 KGG_SYSTEM



o:\key_der\TREE_SYS.flo

Figure 6-2 Key relations for KGG_SYSTEM

6.4.2 KGG_CARDS



o:\..key_der\TREE_CRD.flo

Figure 6-3 Key relations for KGG_CARDS

6.4.3 KGG_EXPIRY

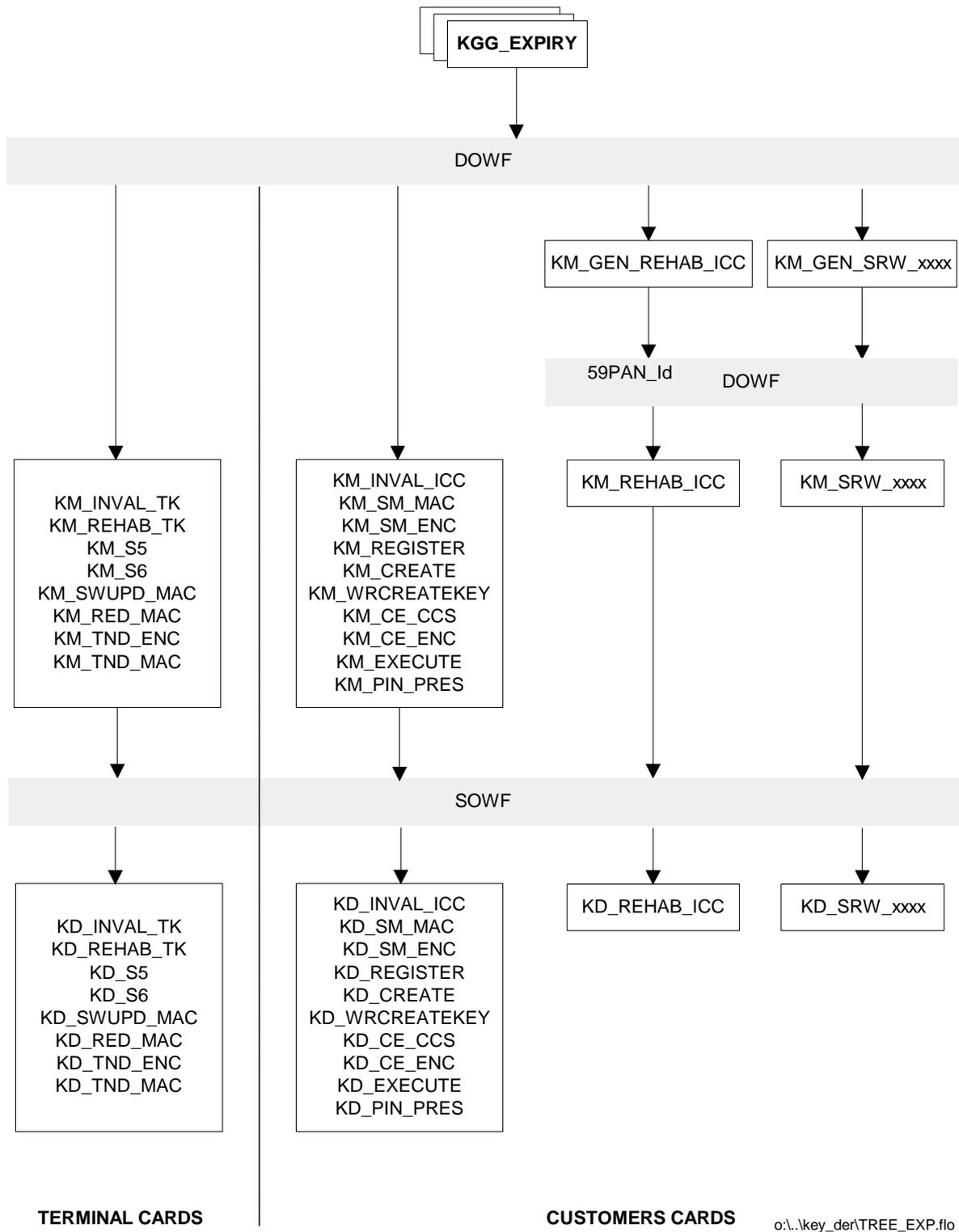


Figure 6-4 : Key relations for KGG_EXPIRY

6.5 Appendix H - Abbreviations

BST	Bank Service Terminal
C&A	Clearing and Administration
CBC	Cipher block chaining
DEC, dec	Decryption
DES	Data encryption standard
DES_3	Triple DES
DOWF	One way function for DES_3 key derivation
ECB	Electronic code book
ECH	Electronic cheque
ENC, enc	Encryption
_enc	Encrypted data or key
_enclmk	Under respective LMK encrypted key
HSM	Host security module (here PCSM)
ICC	Integrated circuit card
IEP	Intersector electronic purse
KM_GEN	Generation key (derived from a top level key)
KM	Master key (derived from top level key or KM_GEN)
KD	Derived key (derived from KM_GEN or KM)
KGG	Top level key ('Generation key of generation keys')
KS	Session key (derived from KD)
LMK	Local Master Key
LMK_var	Variant of a LMK (for different types of keys)
LSB	Least significant Bit/Byte
MAC	Message authentication code or function to calculate a MAC
MSB	Most significant Bit/Byte
OWF	One way function (e.g. Triple DES)
PCSM	PC - Security Module
Pterm	Purchase Terminal (= Merchant Terminal)
RSA	Rivest-Shamir-Adleman cryptographic algorithm
SAM	Security application module
SOWF	One way function for single DES key derivation
TK	Terminal card (SAM)
TDES	Triple DES (DES_3)
tx	Transaction
XOR	Exclusive OR

Table 6-49 : List of Abbreviations

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