HSD IVR (HSDI)

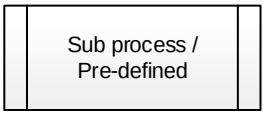
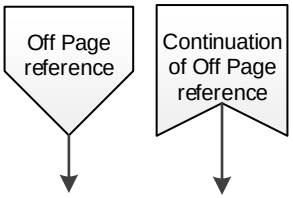
Last updated on: June 22 , 2016

Version: 1.4

Version History

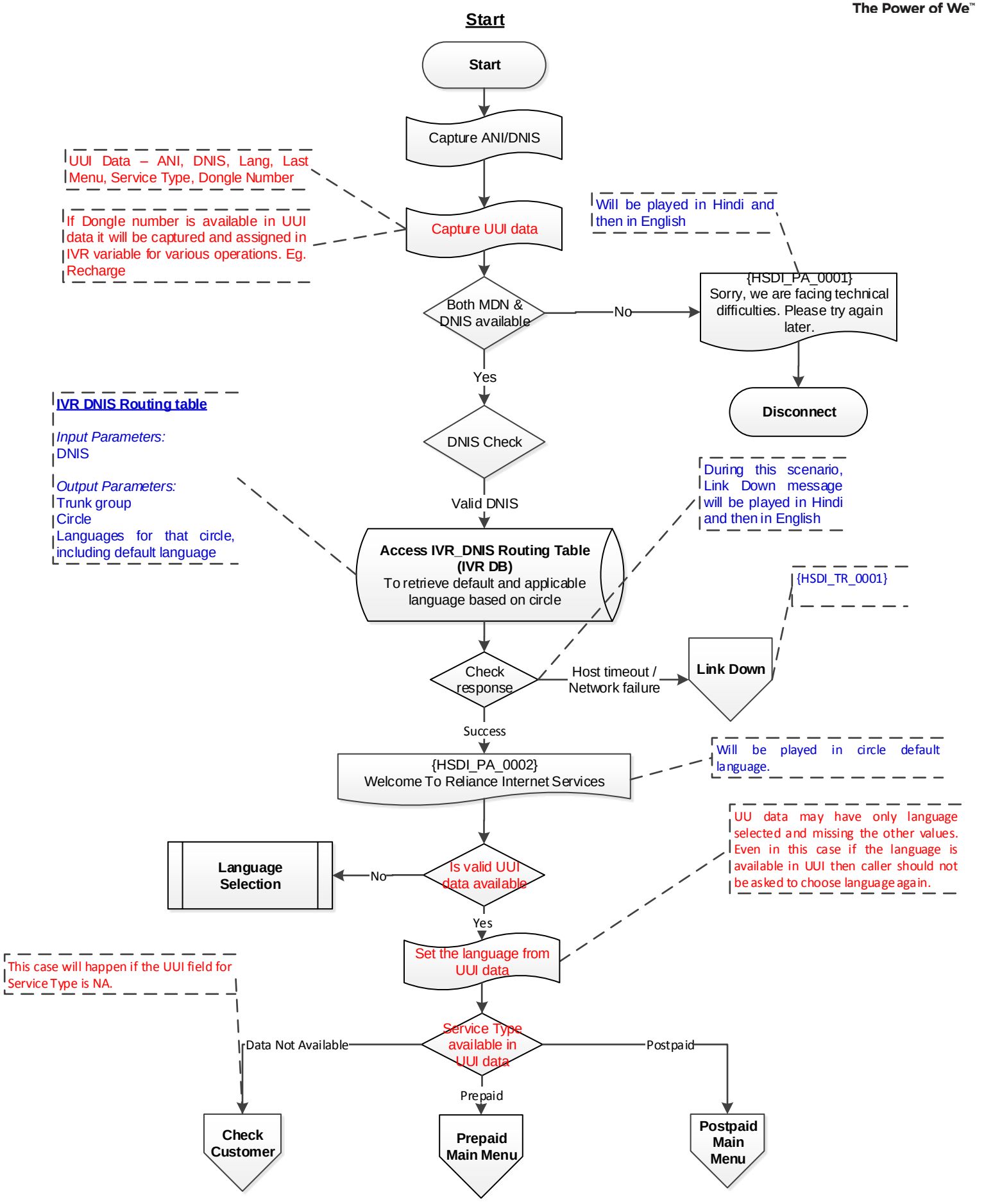
Version No / Date	Change Initiated By	IC Engineer	Summary of Changes
0.01 / Jan 31.2015	-	Raajesh Kumar AS	Initial draft of the call flow
0.02 / Feb 06.2015	Servion	Raajesh Kumar AS	Internal Reviews Incorporated
0.03 / Feb 26.2015	RCOM	Daranivasan.A	Complete revamp as requested by customer
1.1 / June 11.2015	RCOM	Daranivasan.A	Base lined version
1.11 / July 14.2015	RCOM	Raajesh Kumar AS	In Language Selection Page: -Added a check condition for data available In Check Customer page: -Full page revamp from customer feedback
1.12 / July 20.2015	-	Karthikeyan G	Check customer page: In case of prepaid caller, call will proceed to prepaid intelligent layer module. Prepaid account information page: Removed prepaid intelligent layer check, reflecting the change made in check customer flow.
1.2 / July 20.2015	RCOM	Karthikeyan G	Re-base lined version
1.3 / March 01.2016	RCOM	Yahya Rayyan	Updated call flow service based on the UUI data availability for call transfer/conference functionality.
1.4 / June 22.2016	Rajesh Manjalkar	Yahya Rayyan	Added 4G customer handling in HSD

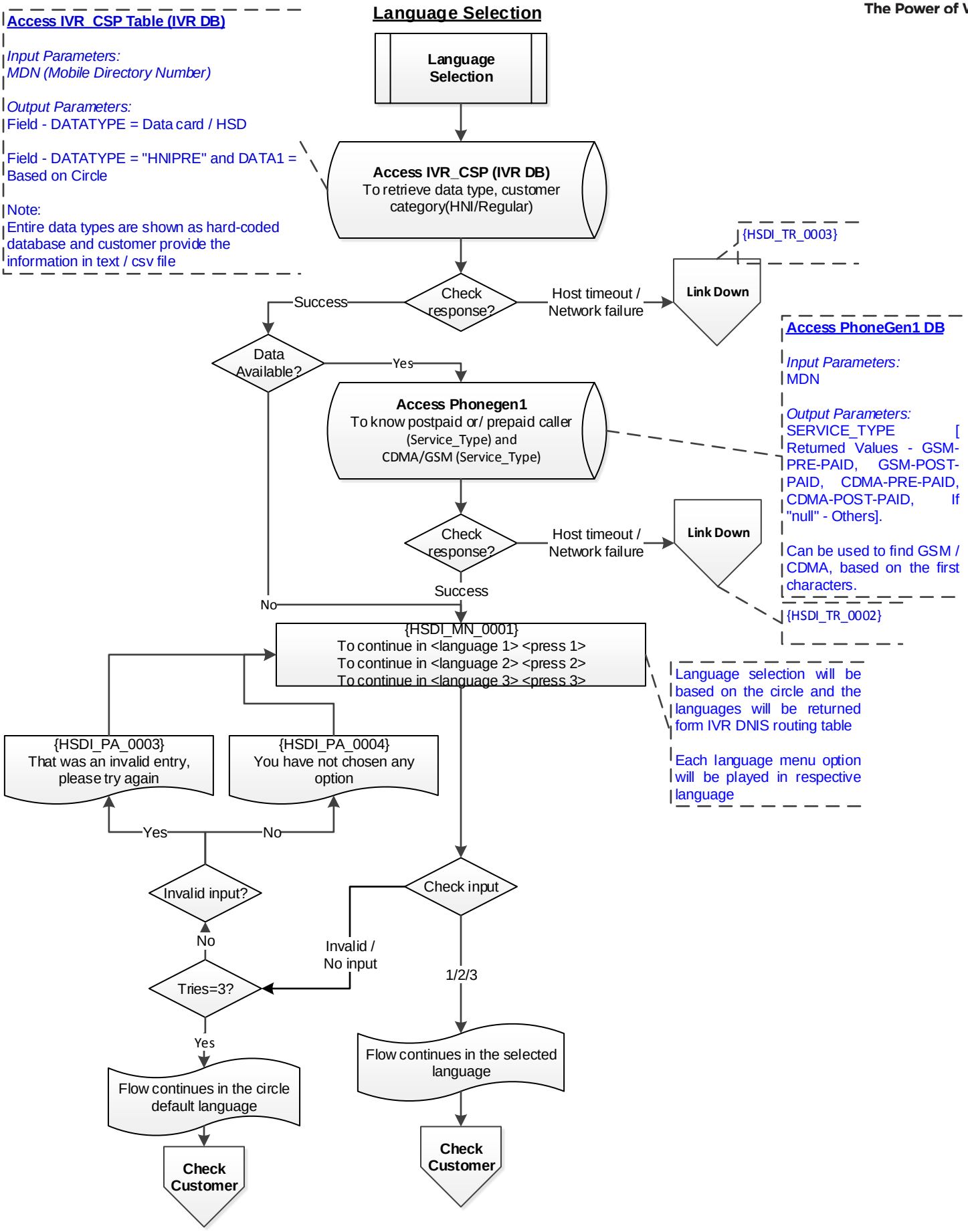
Standard Call Flow Conventions

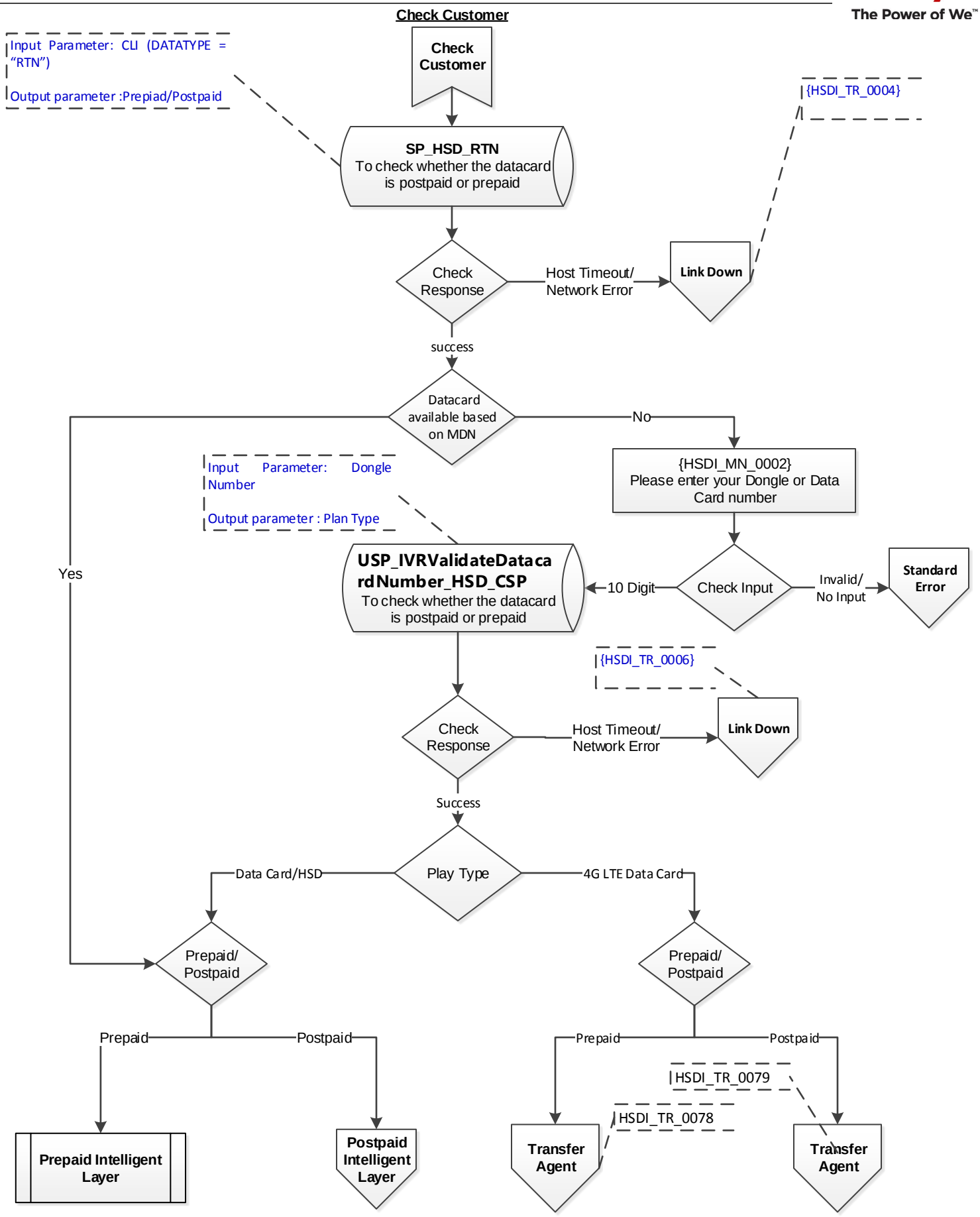
	This shape represents the Start or End of the IVR Application
	This shape represents speech announcements with out caller input
	This shape represents any process that happens in the background and transparent to the caller
	This shape represents the Menu option, the same shape also represents the collection of a string of digits (prompt and collect option).
	This shape represents a condition on which a decision is made to chose a branch in the call flow. It can be based on the input provided by the caller or the result from some external processor (a database operation).
	This shape is used for a process that has already been defined elsewhere. This indicates that there is another flowchart available for this predefined process, and should reference that source for more information. Typically is used to simplify complex flowcharts by moving a large part of the flowchart to another flowchart.
	This shape is a page connector which means the continuation of the flow is in another page.
	This shape represents the host or database access.
	This shape is a page connector which means the continuation of the flow in the same page.

Universal Business Rules

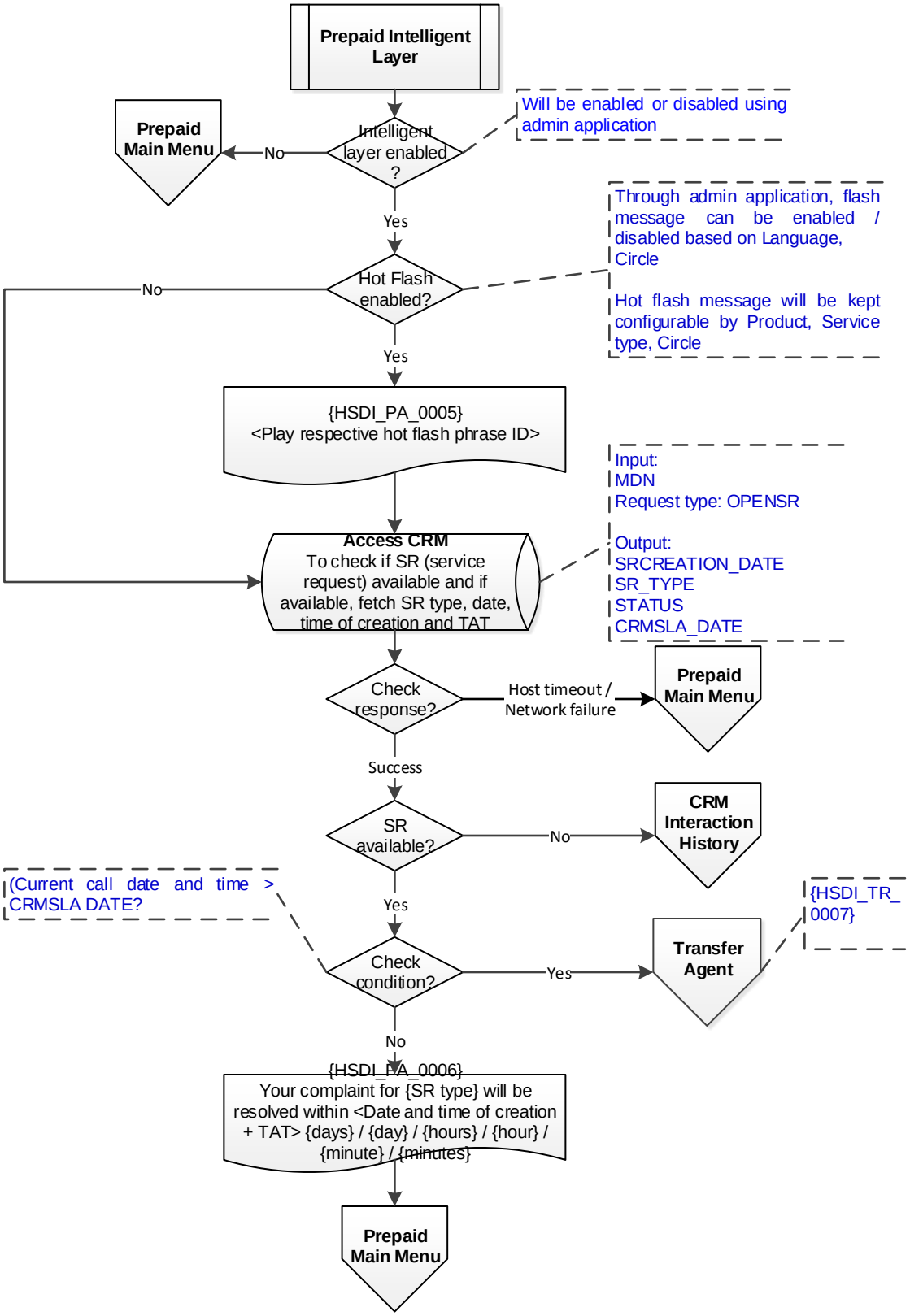
S.No.	Functionality	Description	Exceptions
1	Call Center Business Hours	24x7	
2	Language of Interaction	Circle based language	Language selection will be dynamically offered based on the circle
3	Dial with interrupt	Applicable when a menu or an announcement is played	Not Applicable if there is a database access
4	No Input timeout	5 Seconds (Configurable)	Not Applicable
5	Inter Digit Timeout	3 Seconds (Configurable)	Not Applicable
6	Host timeout	5 Seconds (Configurable)	Not Applicable
7	Maximum number of tries	3 Tries (1 initial try + 2 retries) No input and Invalid input will have combined 3 tries.	Not Applicable
8	Touch Tone Entry	Application will accept DTMF numeric, Hash (#), and asterisk (*) inputs only	Application will not accept any alphabet, or speech inputs
9	Announcing Numbers	The application will announce numbers as a whole. For example 250 will be announced as Two Five Zero	Not Applicable
10	Announcing Date	Dates (DD / MM / YYYY) will be announced in words, for example 15 / 05 / 2005 will be announced as Fifteenth May Two Thousand and Five	Not Applicable
11	Announcing Currency	The application will announce the currency information as Major Currency (Rupees) and Minor Currency (Paise) For example, 250.50 will be announced as Two Hundred and fifty rupees and fifty paise. If any one of the currency portion is zero, the application will not announce the same. If both the currency portion are zero, the application will announce it as Zero balance.	Not Applicable
12	Global Prompts (Feature level)	To repeat the message <press 0> To return to the previous menu <press 7> To return to the main menu <press 8> To speak to our customer service representative <press 9>	-Feature level global prompt will be played followed by an announcement.


Start
Start
Capture ANI/DNIS
UUI Data – ANI, DNIS, Lang, Last Menu, Service Type, Dongle Number
If Dongle number is available in UUI data it will be captured and assigned in IVR variable for various operations. Eg. Recharge
Capture UUI data
Will be played in Hindi and then in English
Both MDN & DNIS available
No
{HSDI_PA_0001}
Sorry, we are facing technical difficulties. Please try again later.
Disconnect
Yes
IVR DNIS Routing table
Input Parameters:
DNIS
Output Parameters:
Trunk group
Circle
Languages for that circle, including default language
DNIS Check
Valid DNIS
During this scenario, Link Down message will be played in Hindi and then in English
Access IVR_DNIS Routing Table (IVR DB)
To retrieve default and applicable language based on circle
{HSDI_TR_0001}
Check response
Host timeout / Network failure
Link Down
Success
{HSDI_PA_0002}
Welcome To Reliance Internet Services
Will be played in circle default language.
UU data may have only language selected and missing the other values. Even in this case if the language is available in UUI then caller should not be asked to choose language again.
Language Selection
No
Is valid UUI data available
Yes
Set the language from UUI data
This case will happen if the UUI field for Service Type is NA.
Service Type available in UUI data
Data Not Available
Postpaid
Prepaid
Check Customer
Prepaid Main Menu
Postpaid Main Menu

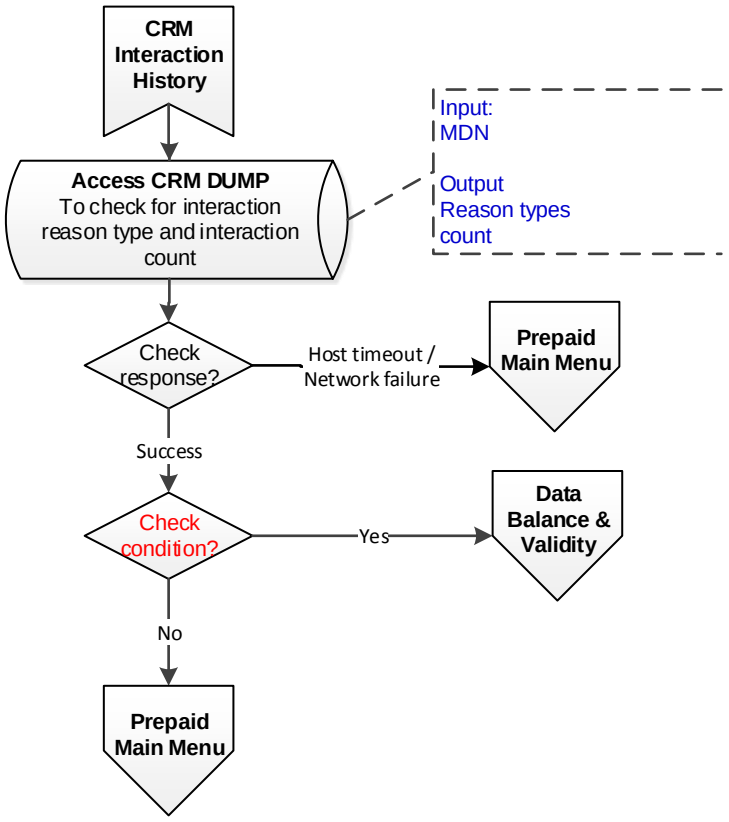

Language Selection
Access IVR_CSP Table (IVR DB)
Input Parameters:
MDN (Mobile Directory Number)
Output Parameters:
Field - DATATYPE = Data card / HSD
Field - DATATYPE = "HNIPRE" and DATA1 = Based on Circle
Note:
Entire data types are shown as hard-coded database and customer provide the information in text / csv file
Language Selection
Access IVR_CSP (IVR DB)
To retrieve data type, customer category(HNI/Regular)
Check response?
Success
Host timeout / Network failure
{HSDI_TR_0003}
Link Down
Data Available?
Yes
No
Access Phonegen1
To know postpaid or/ prepaid caller (Service_Type) and CDMA/GSM (Service_Type)
Access PhoneGen1 DB
Input Parameters:
MDN
Output Parameters:
SERVICE_TYPE [Returned Values - GSM-PRE-PAID, GSM-POST-PAID, CDMA-PRE-PAID, CDMA-POST-PAID, If "null" - Others].
Can be used to find GSM / CDMA, based on the first characters.
{HSDI_TR_0002}
Check response?
Host timeout / Network failure
Link Down
Success
{HSDI_MN_0001}
To continue in <language 1> <press 1>
To continue in <language 2> <press 2>
To continue in <language 3> <press 3>
Language selection will be based on the circle and the languages will be returned form IVR DNIS routing table
Each language menu option will be played in respective language
{HSDI_PA_0003}
That was an invalid entry, please try again
{HSDI_PA_0004}
You have not chosen any option
Yes
No
Invalid input?
Check input
No
Invalid / No input
1/2/3
Tries=3?
Yes
Flow continues in the circle default language
Flow continues in the selected language
Check Customer
Check Customer


Check Customer
Check Customer
Input Parameter: CLI (DATATYPE = "RTN")
Output parameter :Prepiad/Postpaid
SP_HSD_RTN
To check whether the datacard is postpaid or prepaid
{HSDI_TR_0004}
Check Response
Host Timeout/ Network Error
Link Down
success
Datacard available based on MDN
No
Yes
Input Parameter: Dongle Number
Output parameter : Plan Type
{HSDI_MN_0002}
Please enter your Dongle or Data Card number
USP_IVRValidateDatacardNumber_HSD_CSP
To check whether the datacard is postpaid or prepaid
10 Digit
Check Input
Invalid/ No Input
Standard Error
{HSDI_TR_0006}
Check Response
Host Timeout/ Network Error
Link Down
Success
Play Type
Data Card/HSD
4G LTE Data Card
Prepaid/ Postpaid
Prepaid/ Postpaid
Prepaid
Postpaid
Prepaid
Postpaid
HSDI_TR_0079
HSDI_TR_0078
Prepaid Intelligent Layer
Postpaid Intelligent Layer
Transfer Agent
Transfer Agent

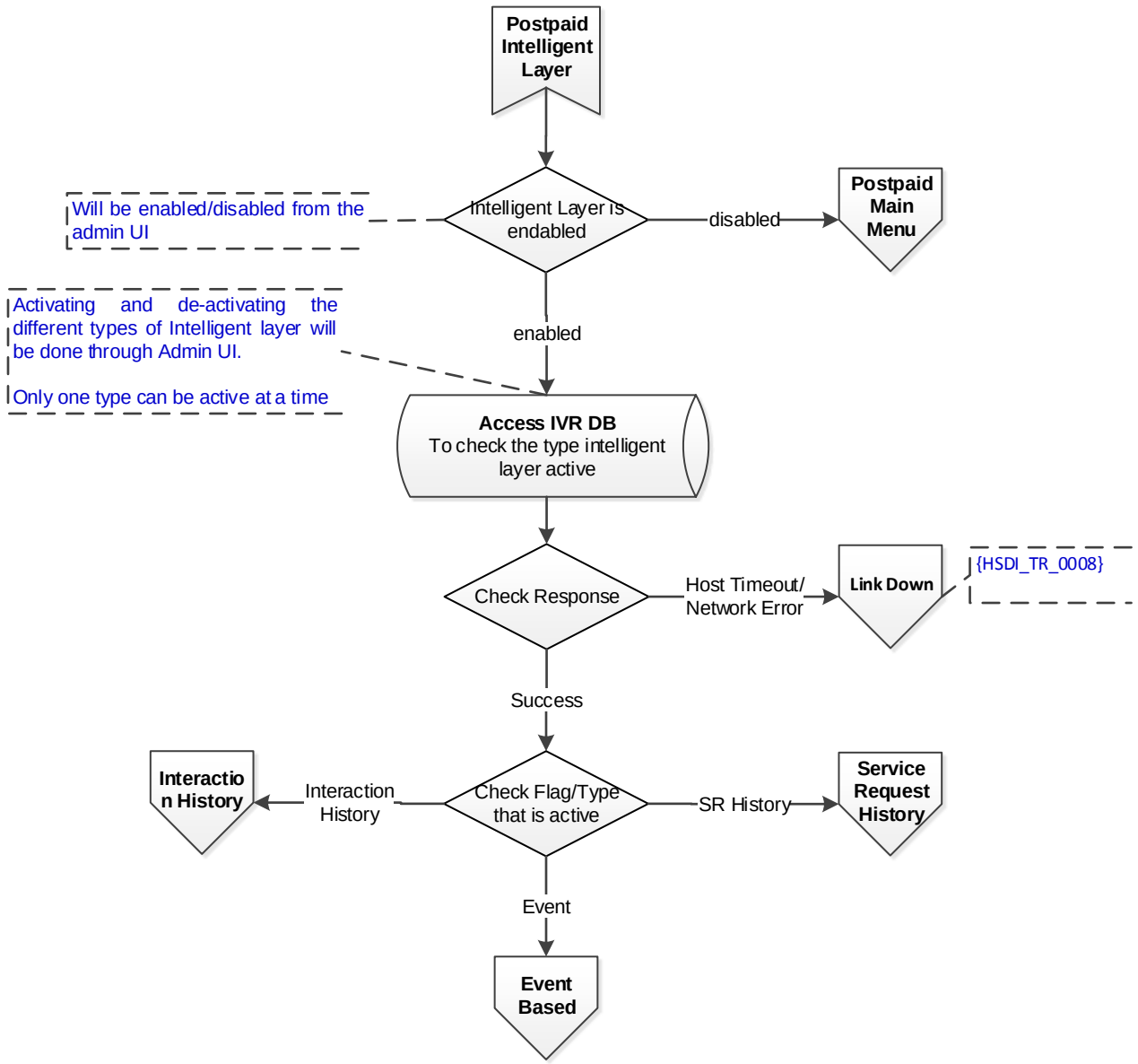
Prepaid Intelligent Layer



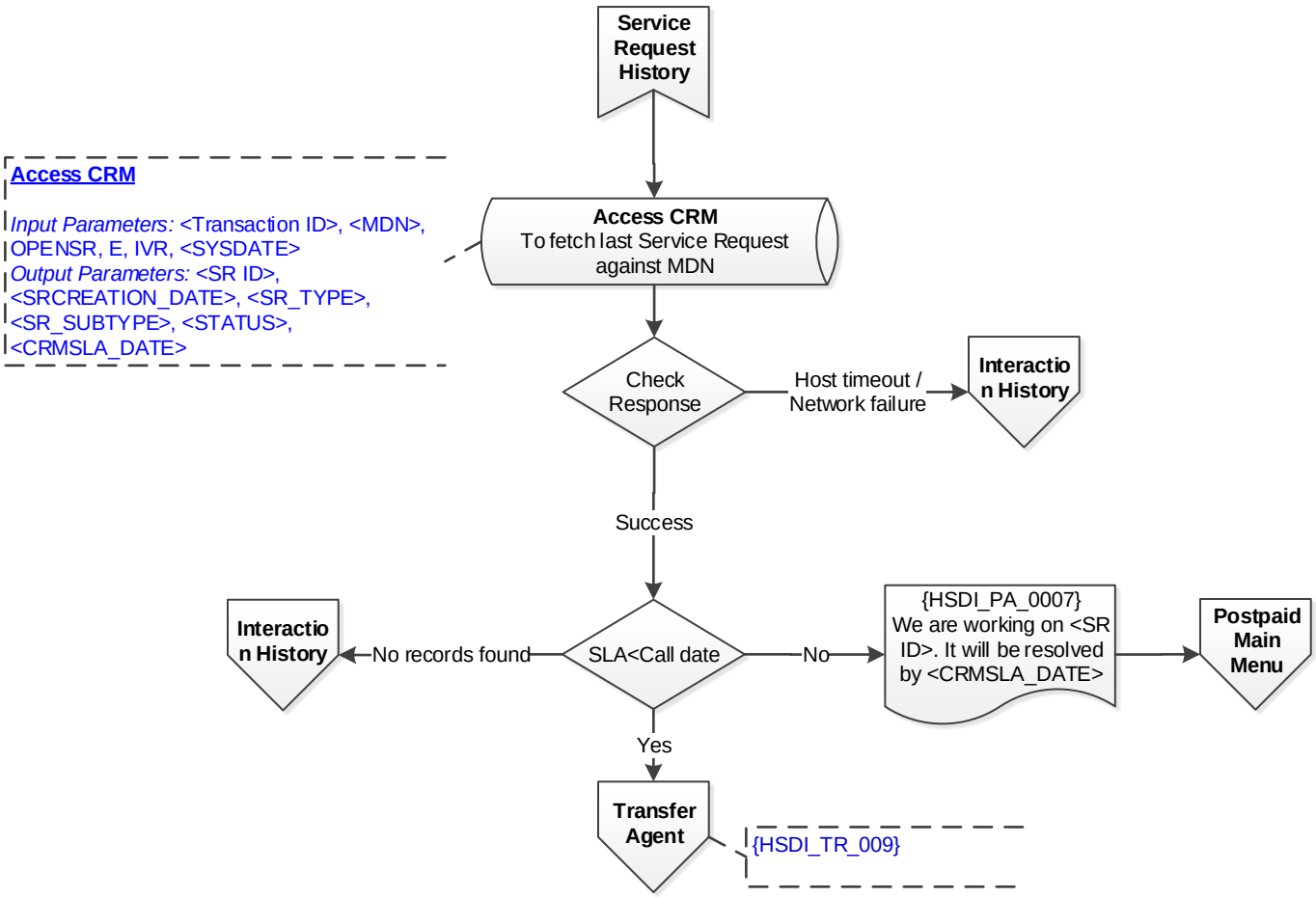
CRM Interaction History



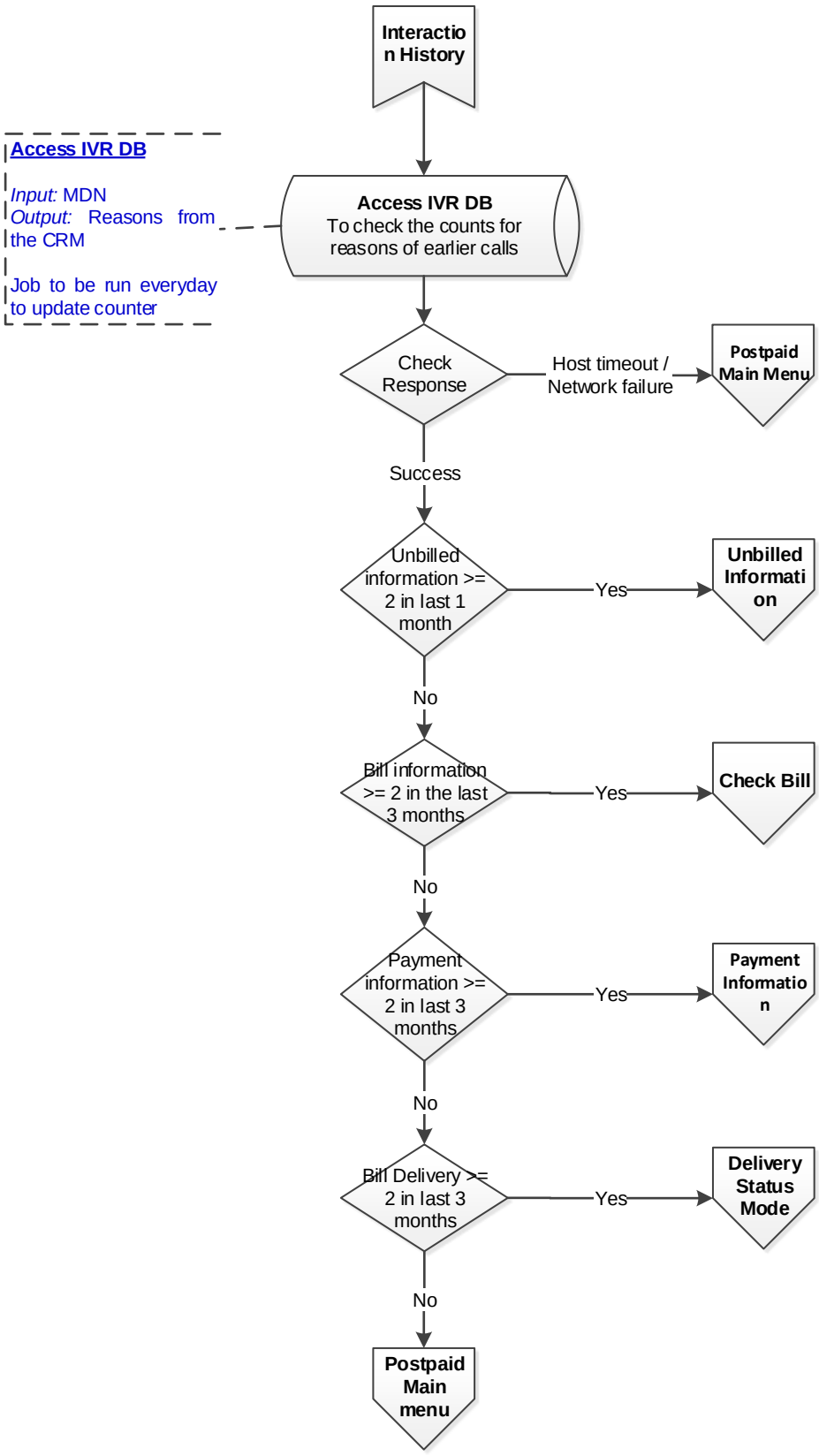
Postpaid Intelligent Layer



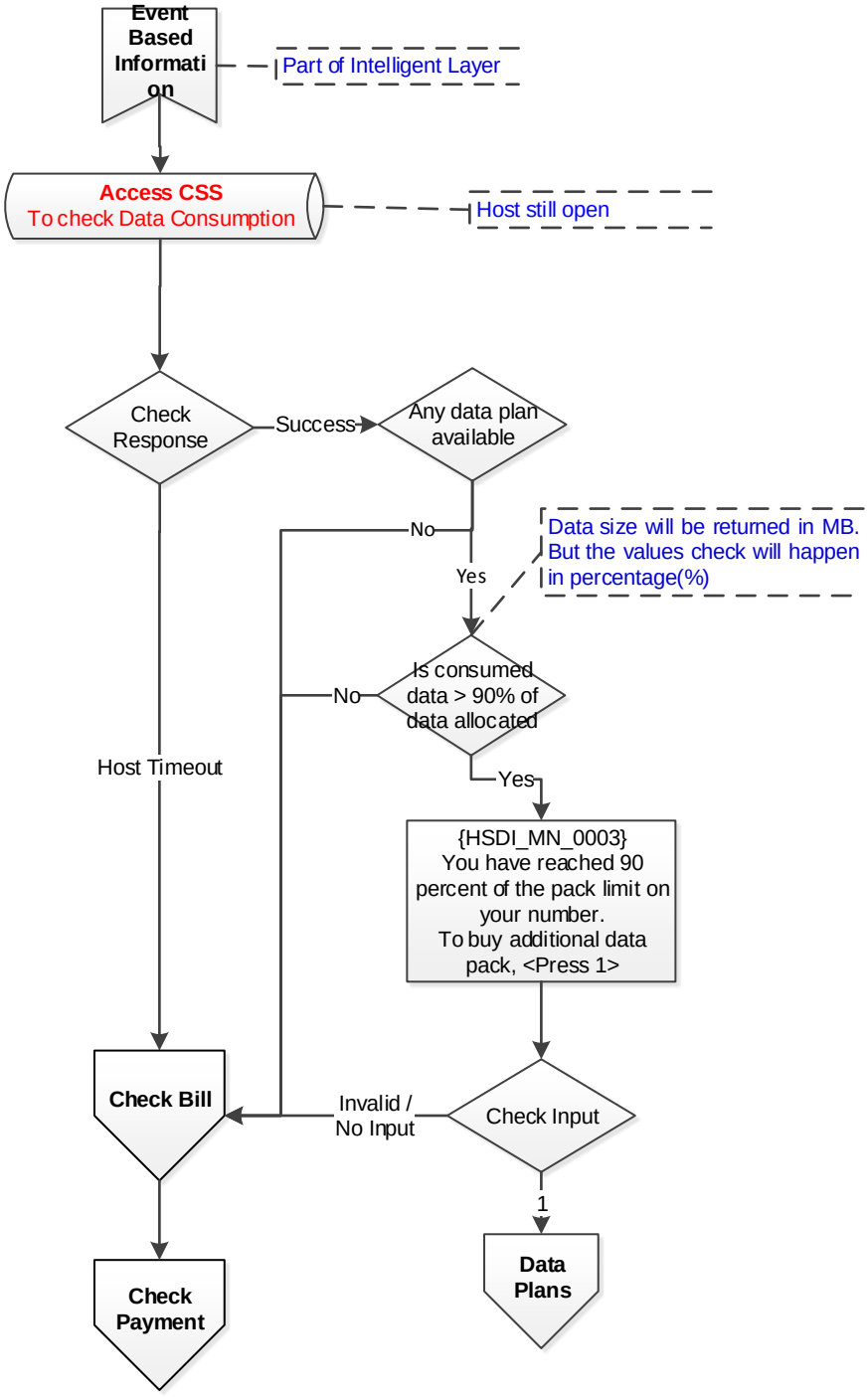
Service Request History



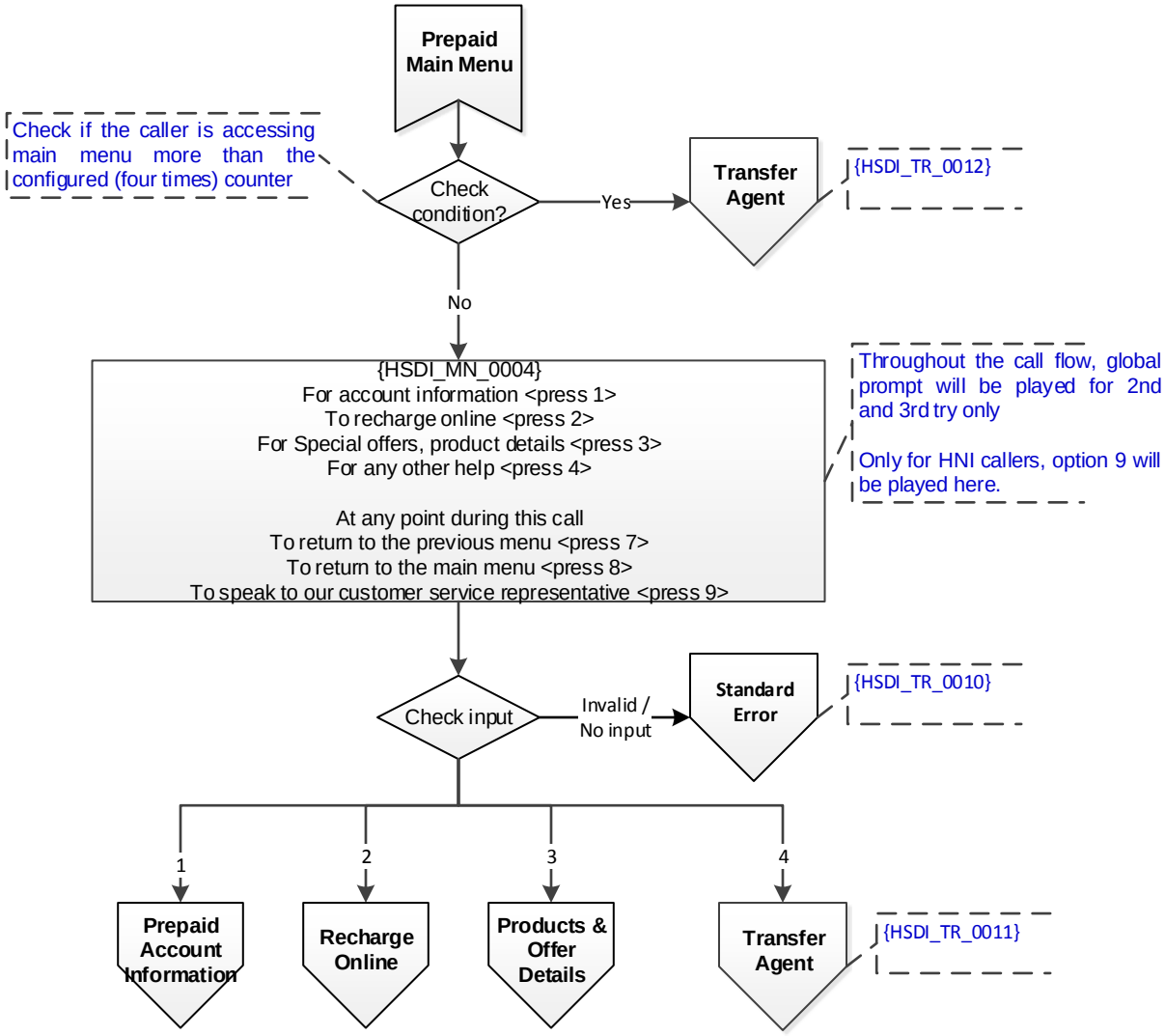
Interaction History



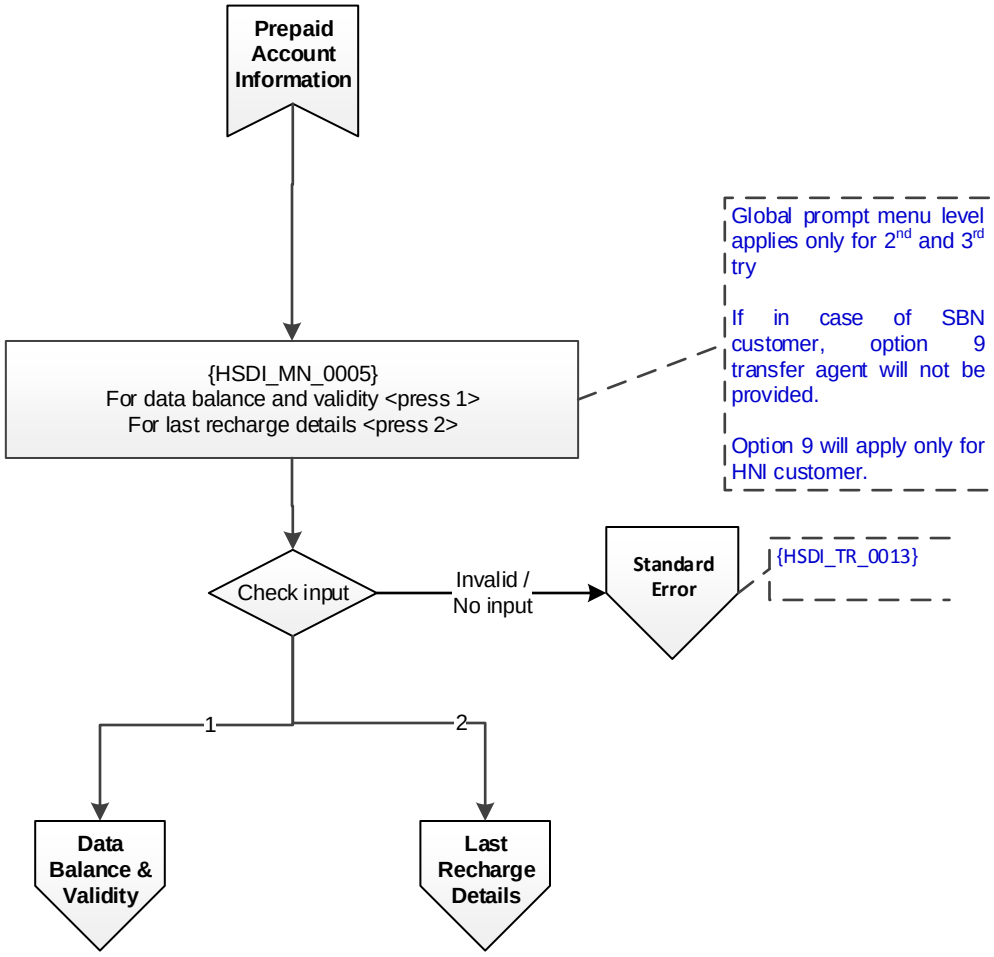
Event Based Information



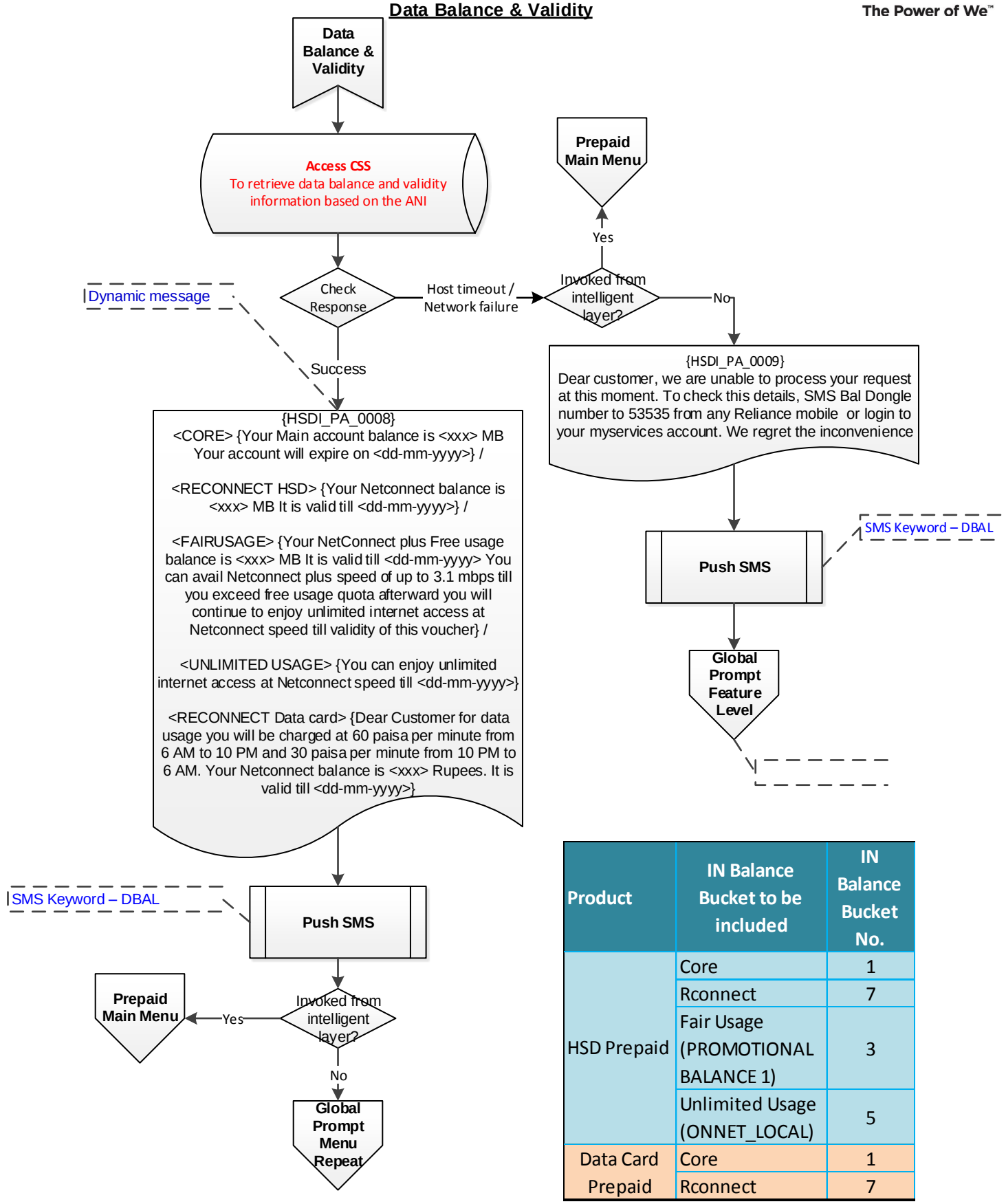
Prepaid Main Menu



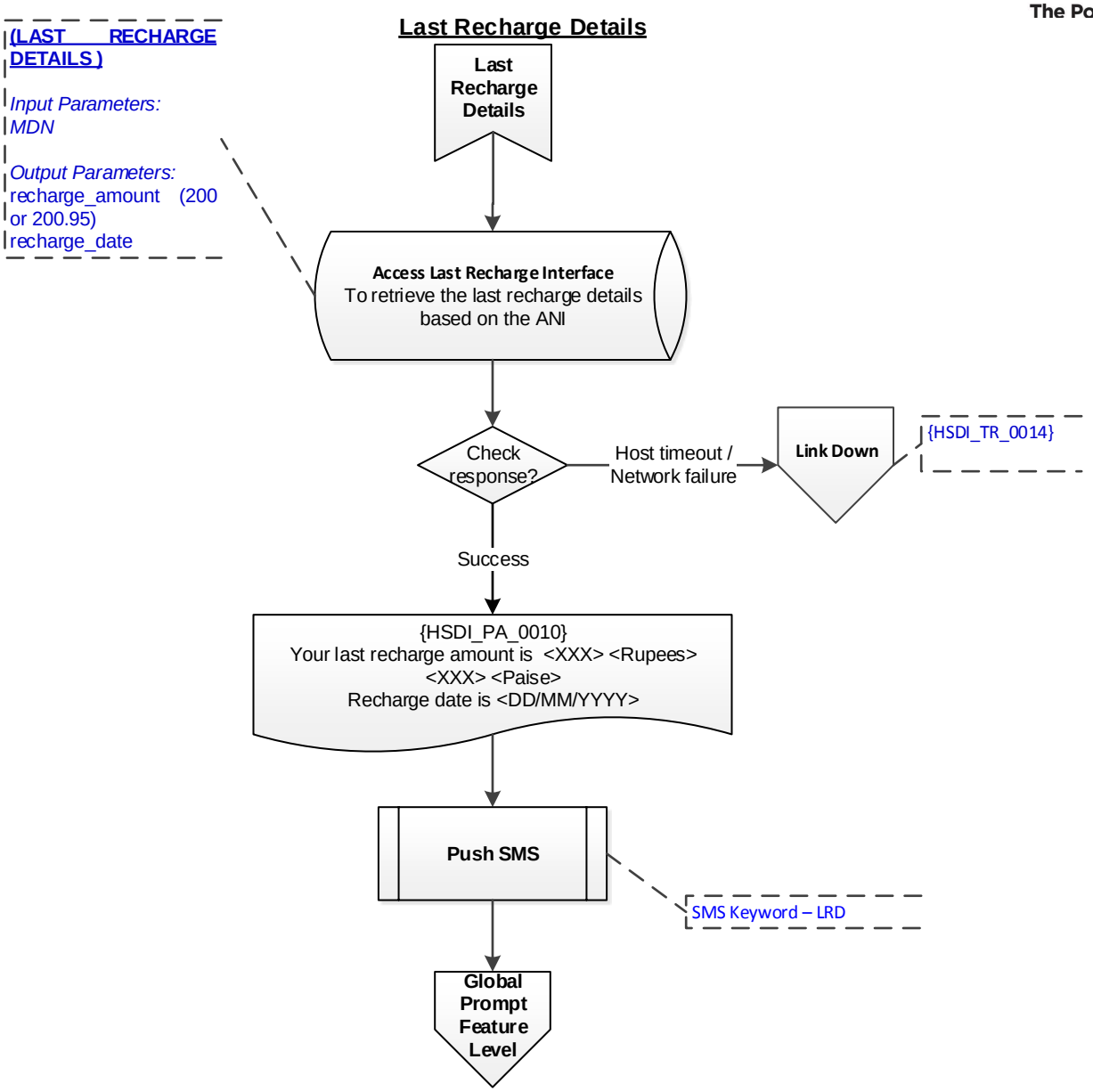
Account Information



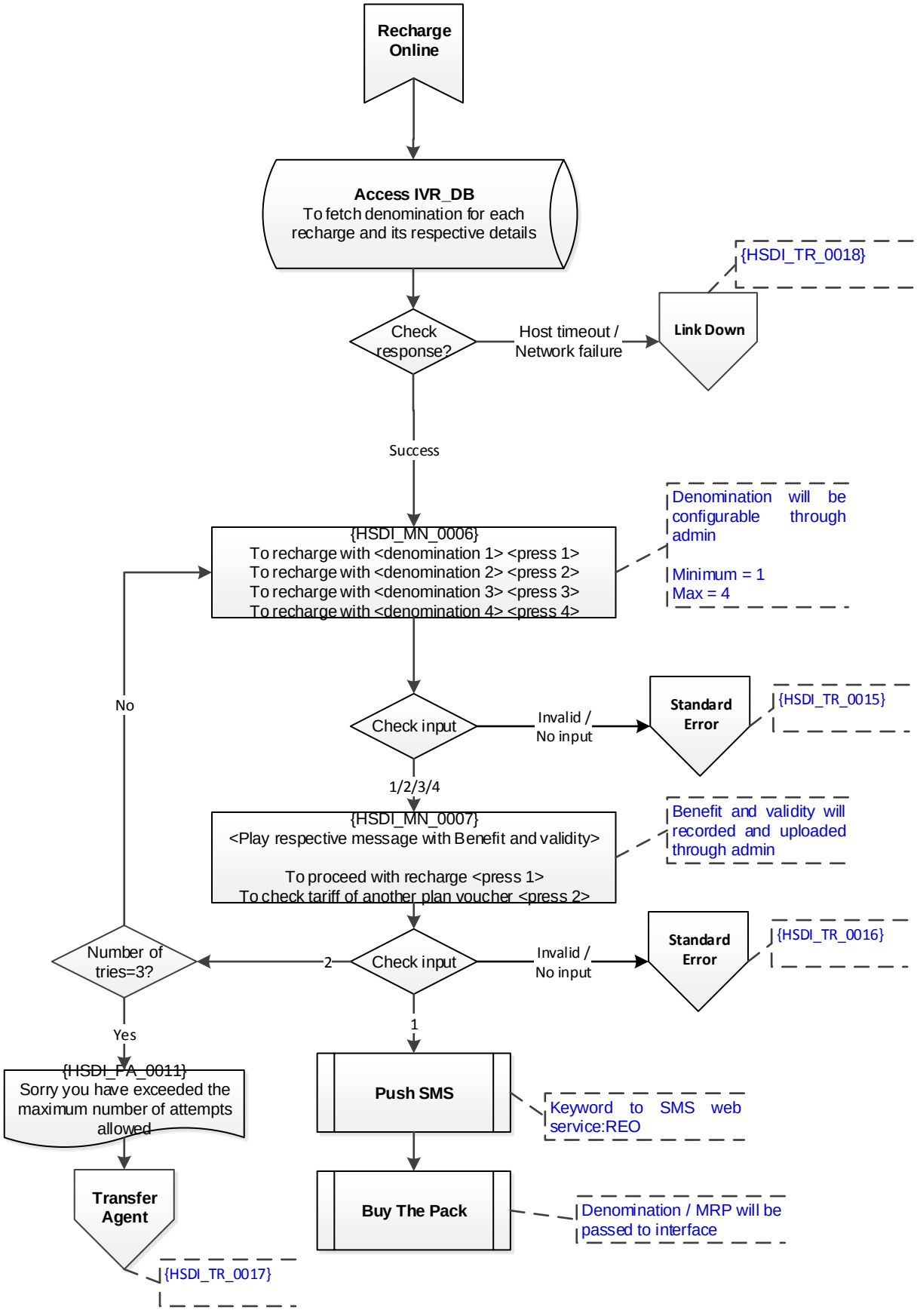
Data Balance & Validity



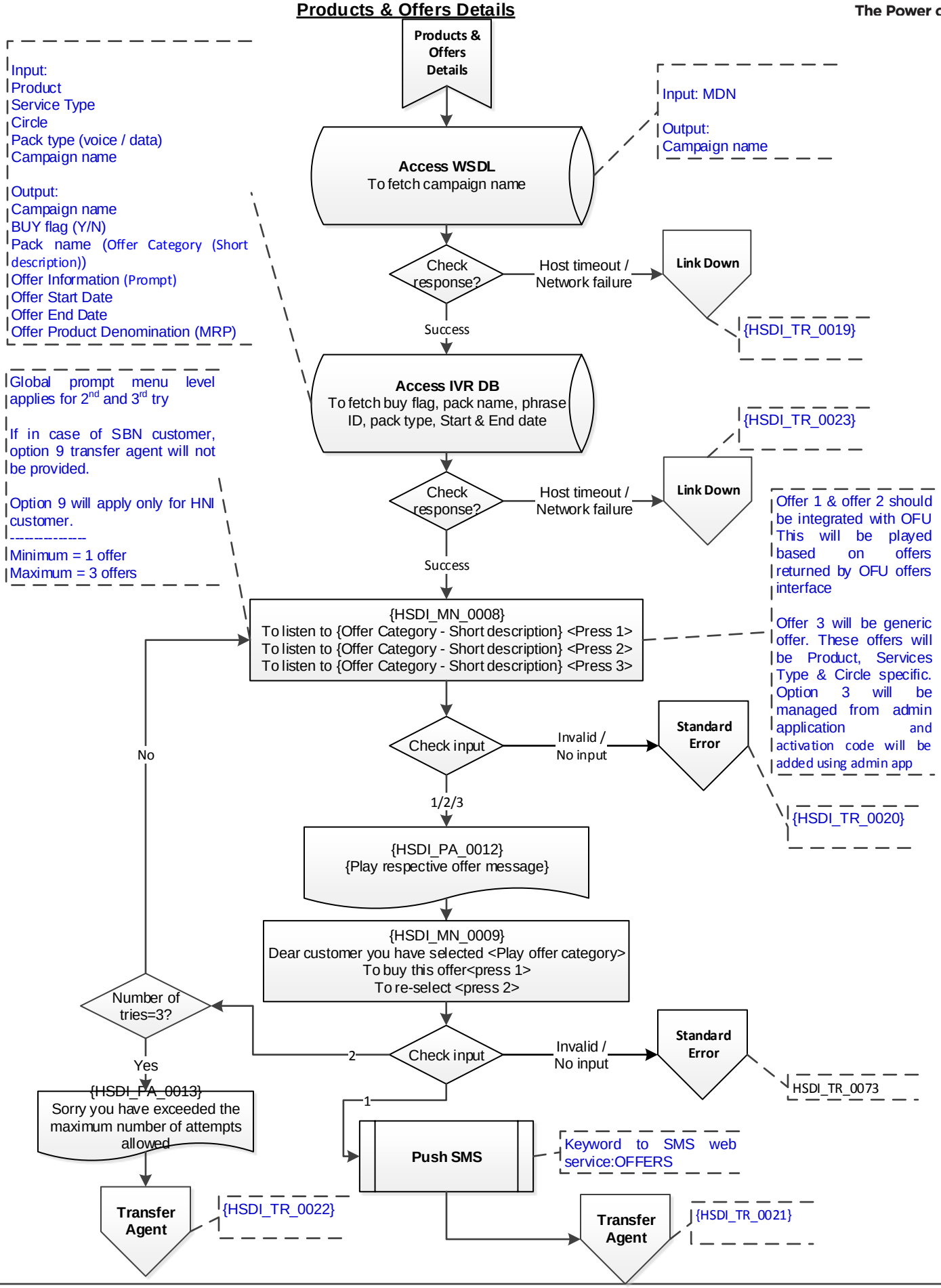
Product	IN Balance Bucket to be included	IN Balance Bucket No.
HSD Prepaid	Core	1
	Rconnect	7
	Fair Usage (PROMOTIONAL BALANCE 1)	3
	Unlimited Usage (ONNET_LOCAL)	5
Data Card Prepaid	Core	1
	Rconnect	7


Last Recharge Details
(LAST RECHARGE DETAILS)
Input Parameters:
MDN
Output Parameters:
recharge_amount (200 or 200.95)
recharge_date
Last Recharge Details
Access Last Recharge Interface
To retrieve the last recharge details based on the ANI
Check response?
Host timeout / Network failure
Link Down
{HSDI_TR_0014}
Success
{HSDI_PA_0010}
Your last recharge amount is <XXX> <Rupees> <XXX> <Paise>
Recharge date is <DD/MM/YYYY>
Push SMS
SMS Keyword – LRD
Global Prompt Feature Level

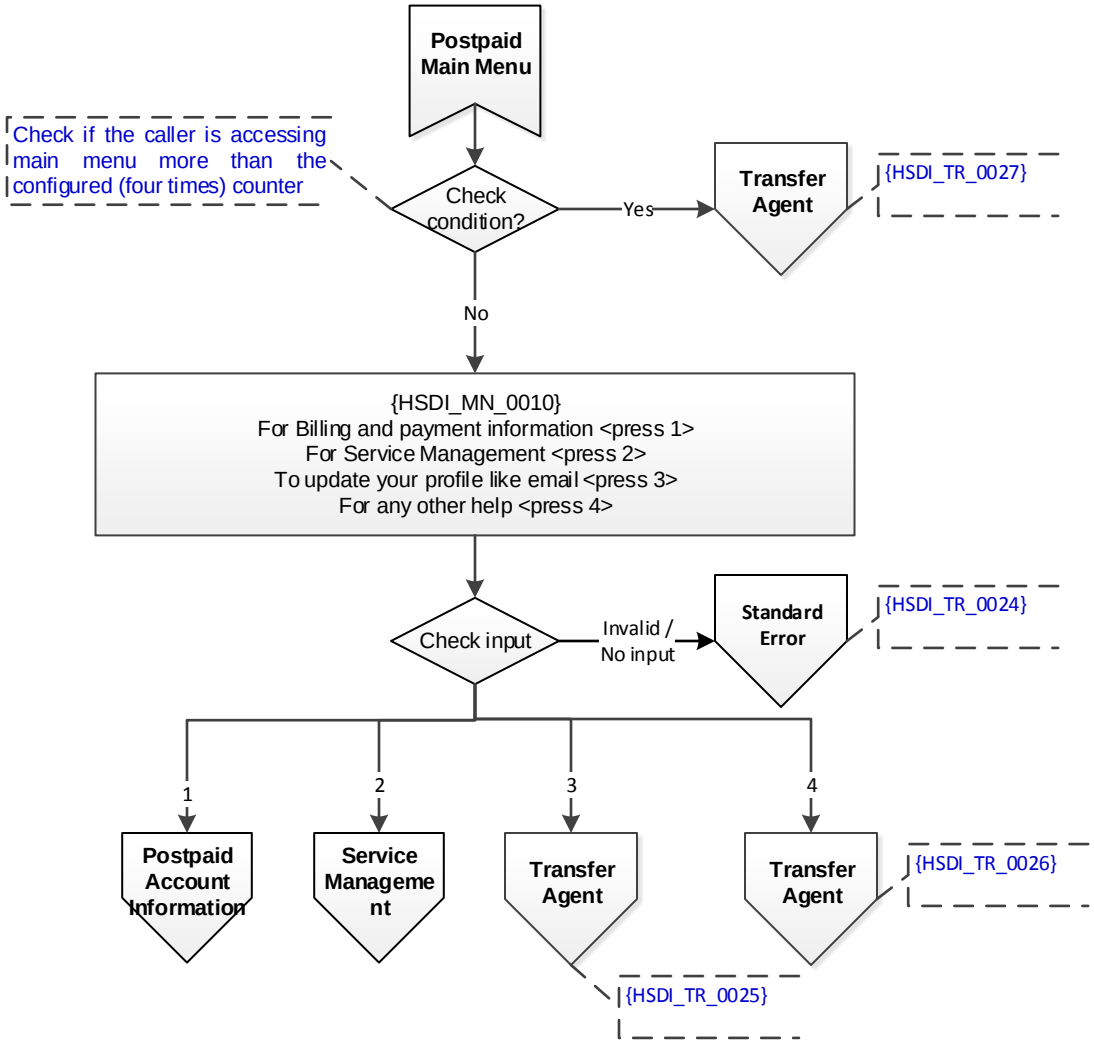
Recharge Online



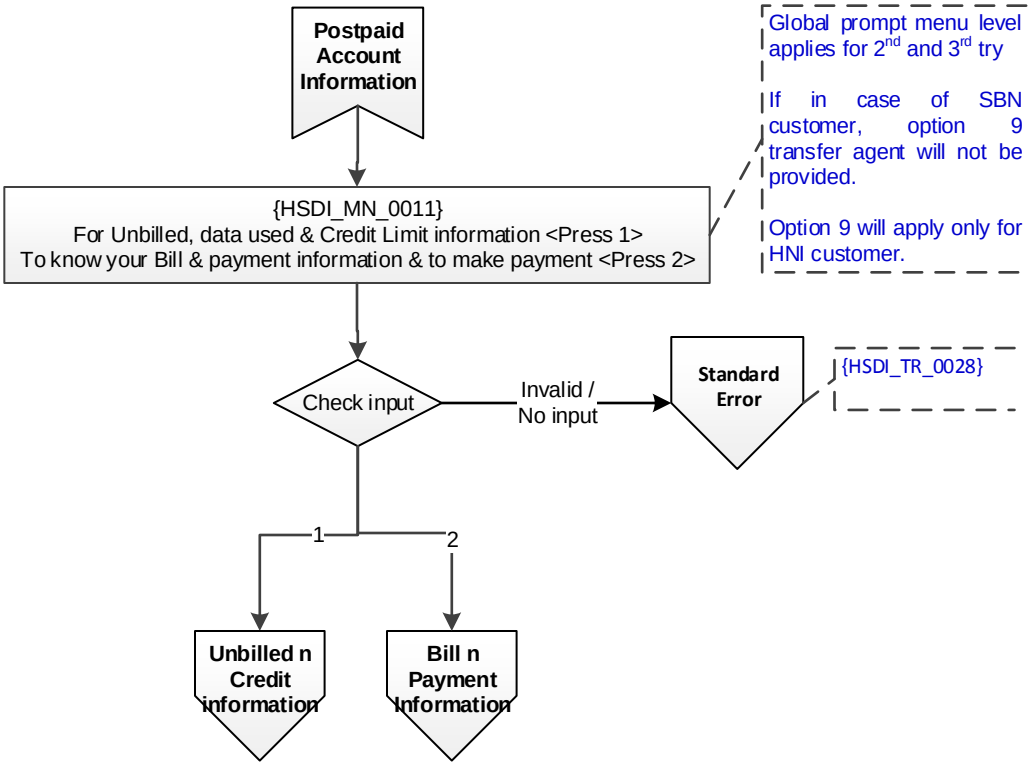
Products & Offers Details



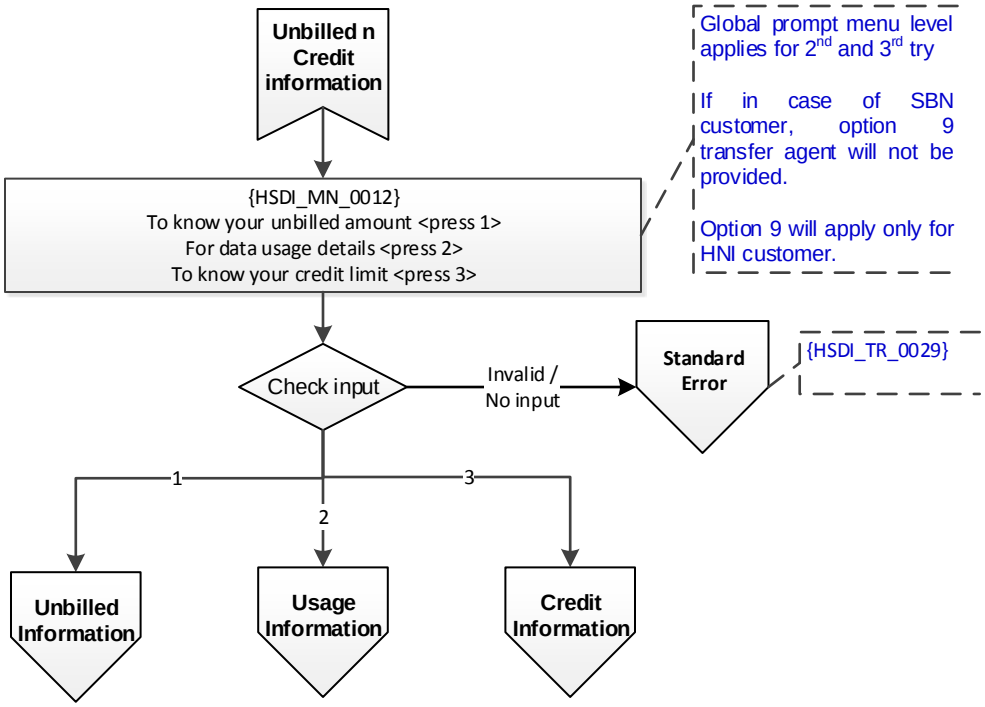
Postpaid Main Menu



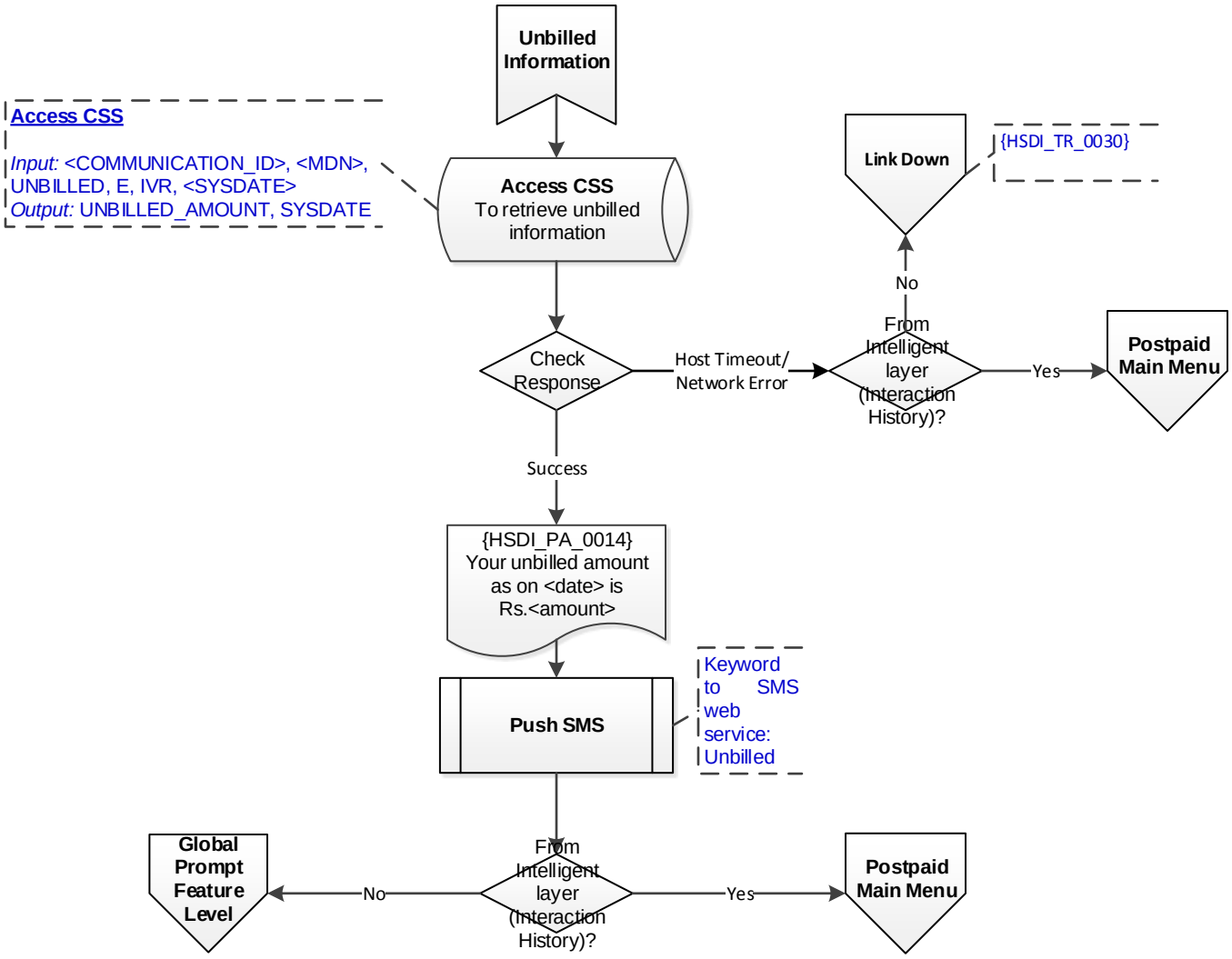
Postpaid Account Information



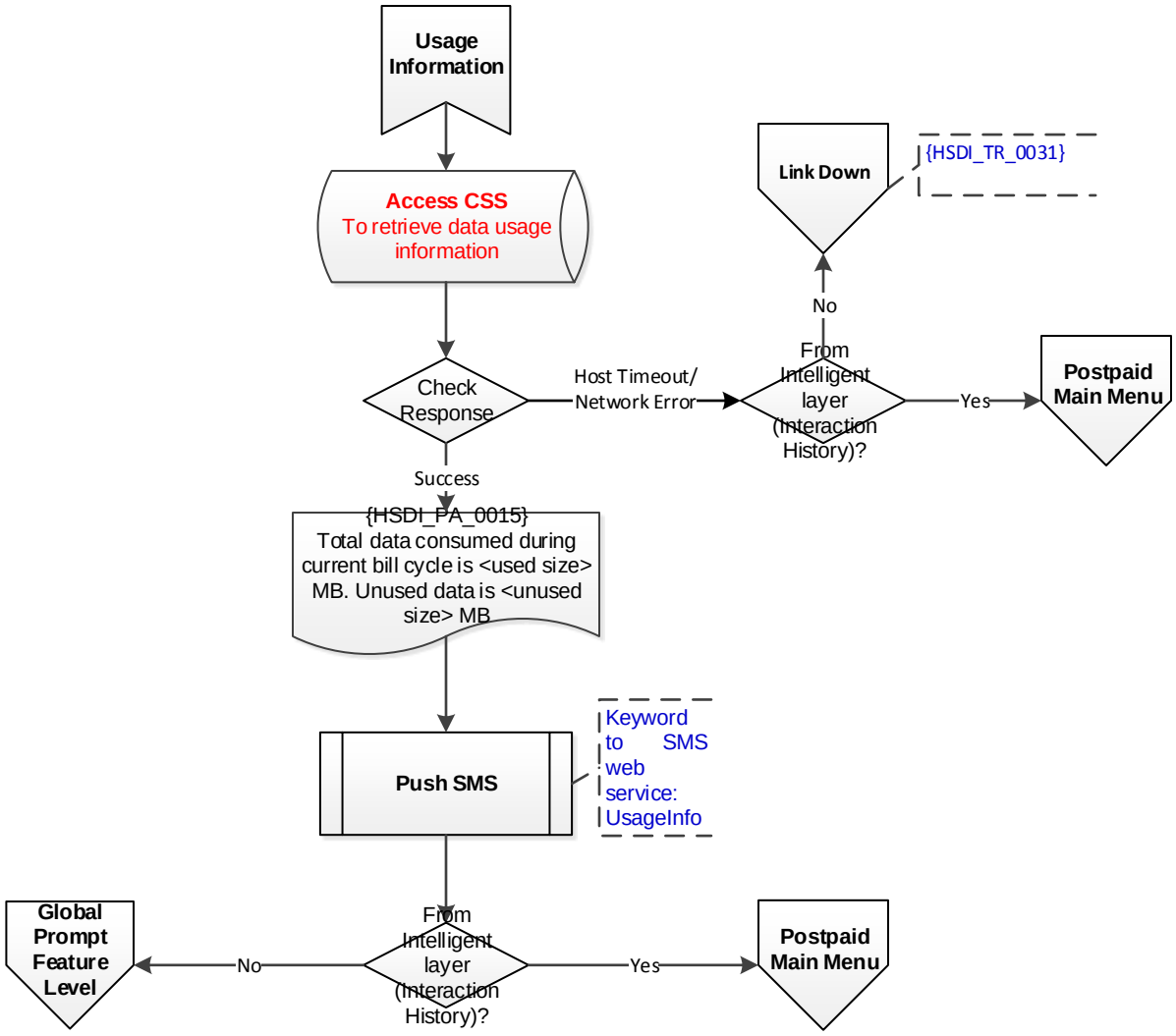
Unbilled n Credit information



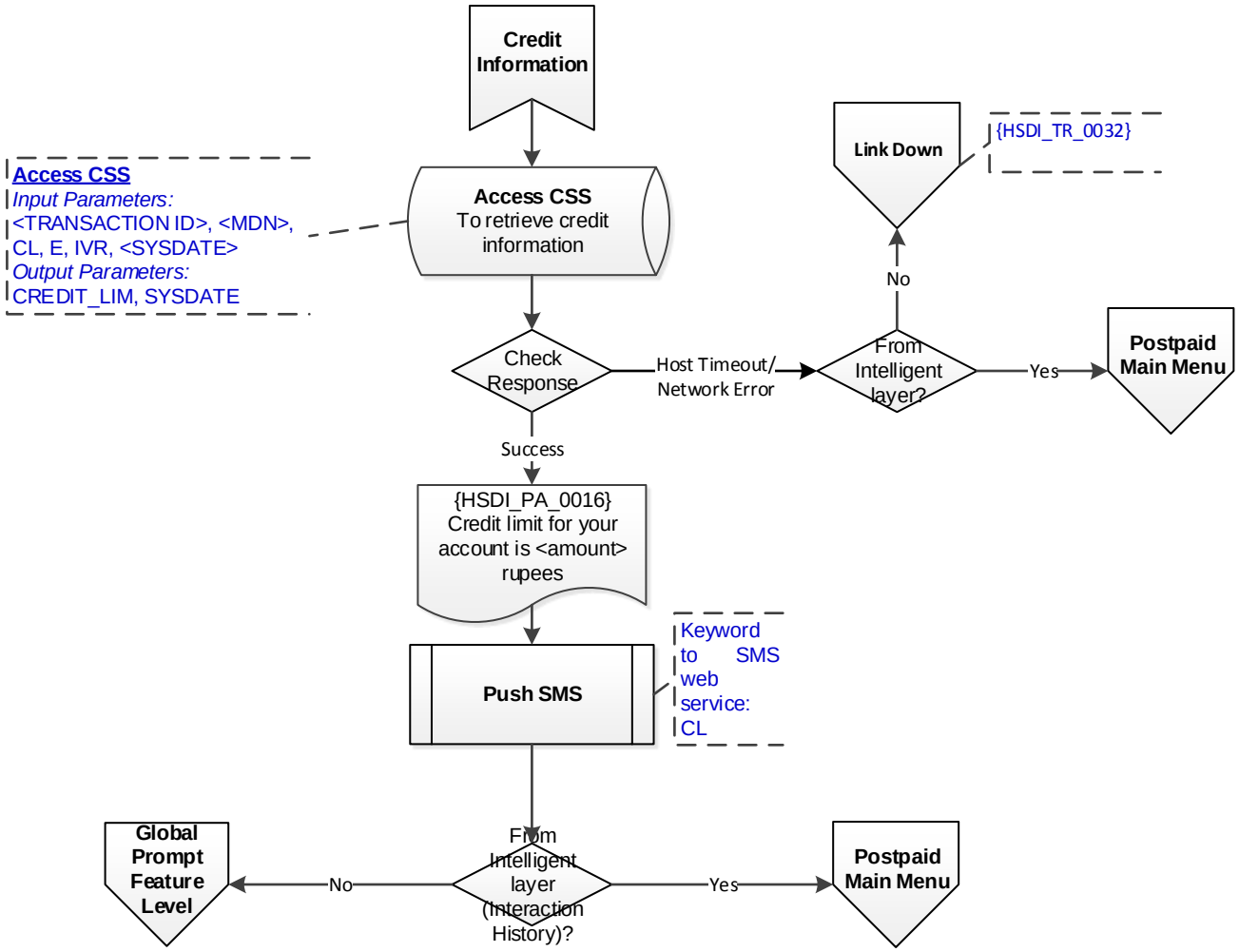
Unbilled Information



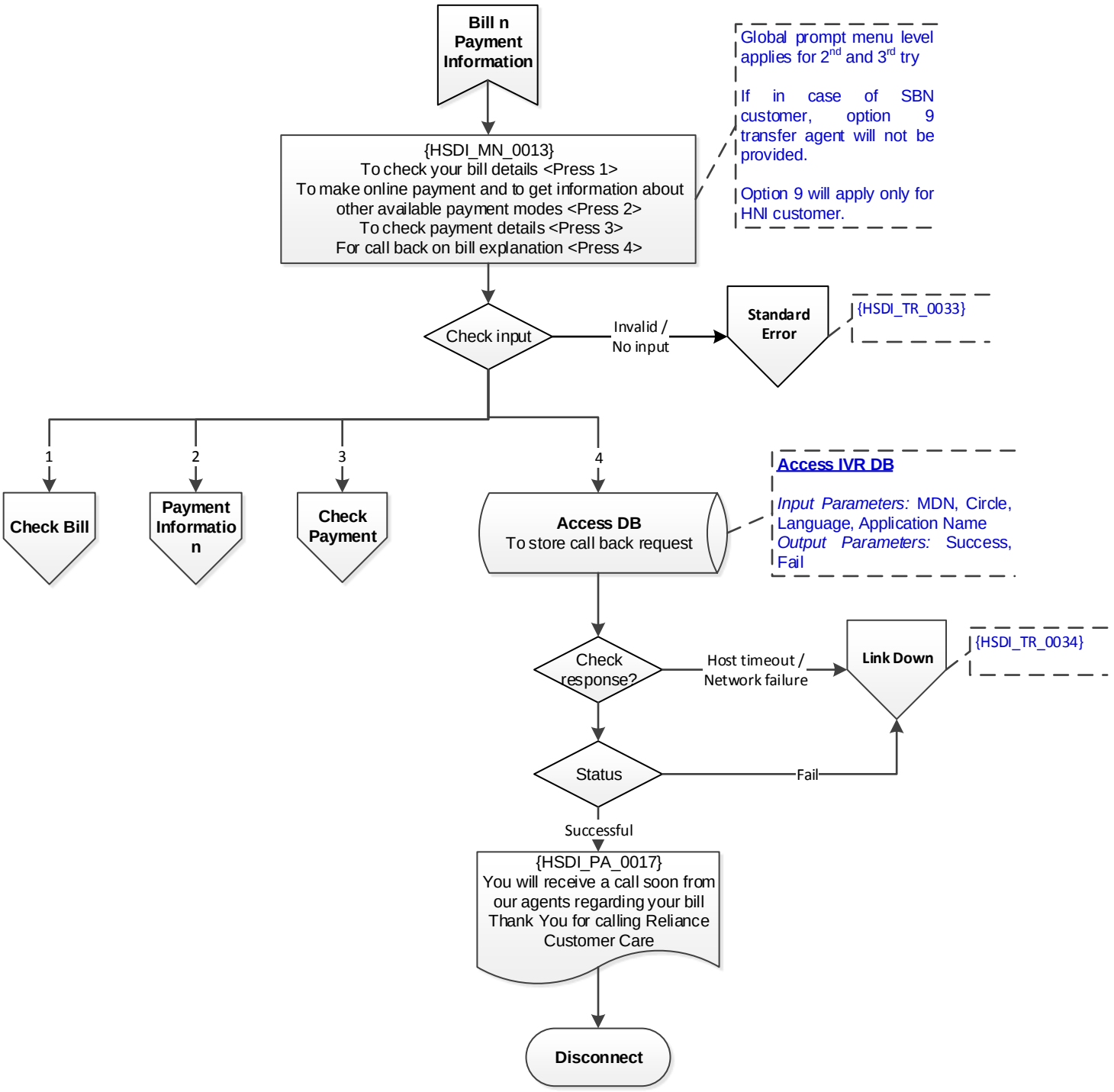
Usage Information



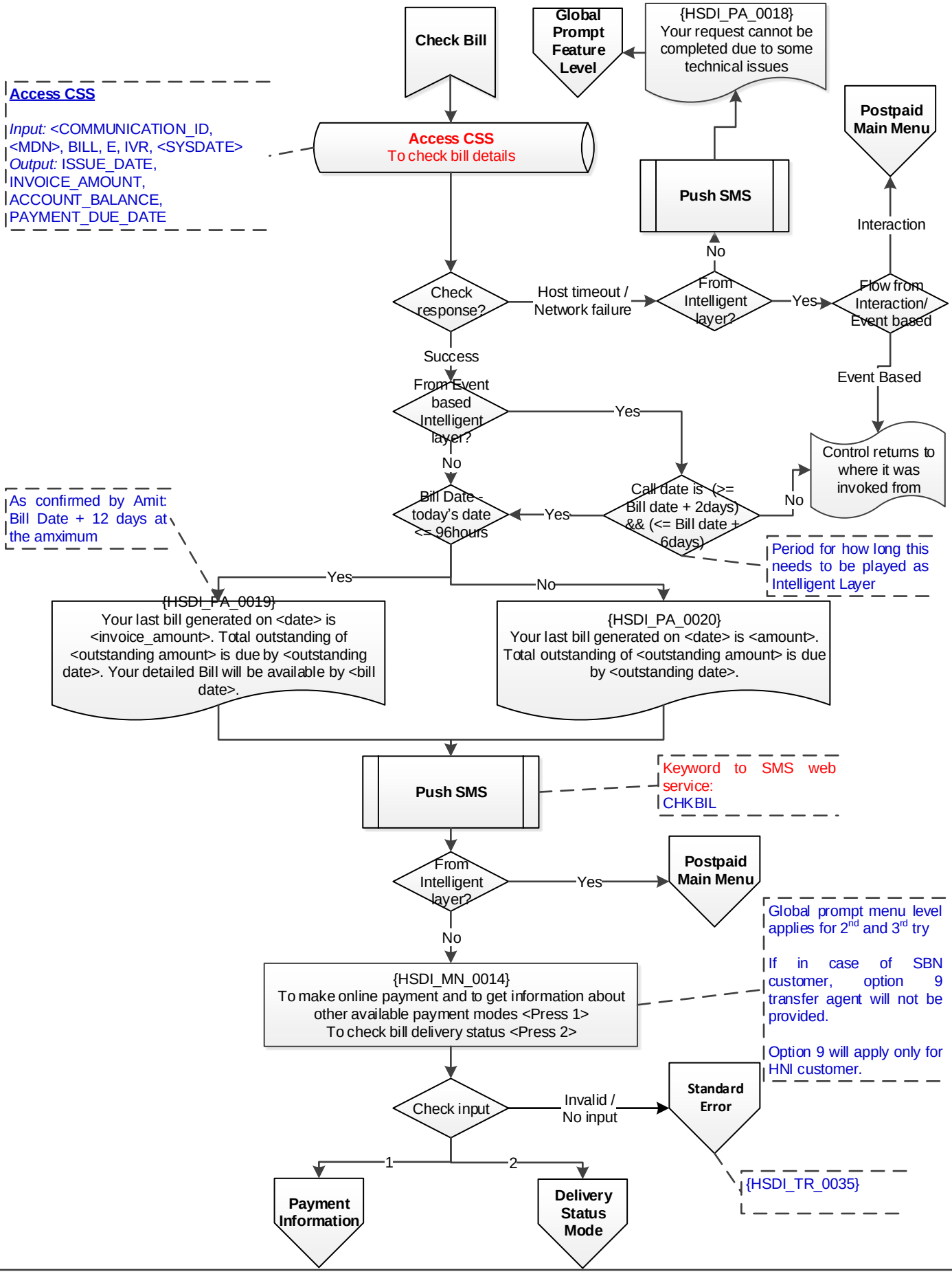
Credit Information



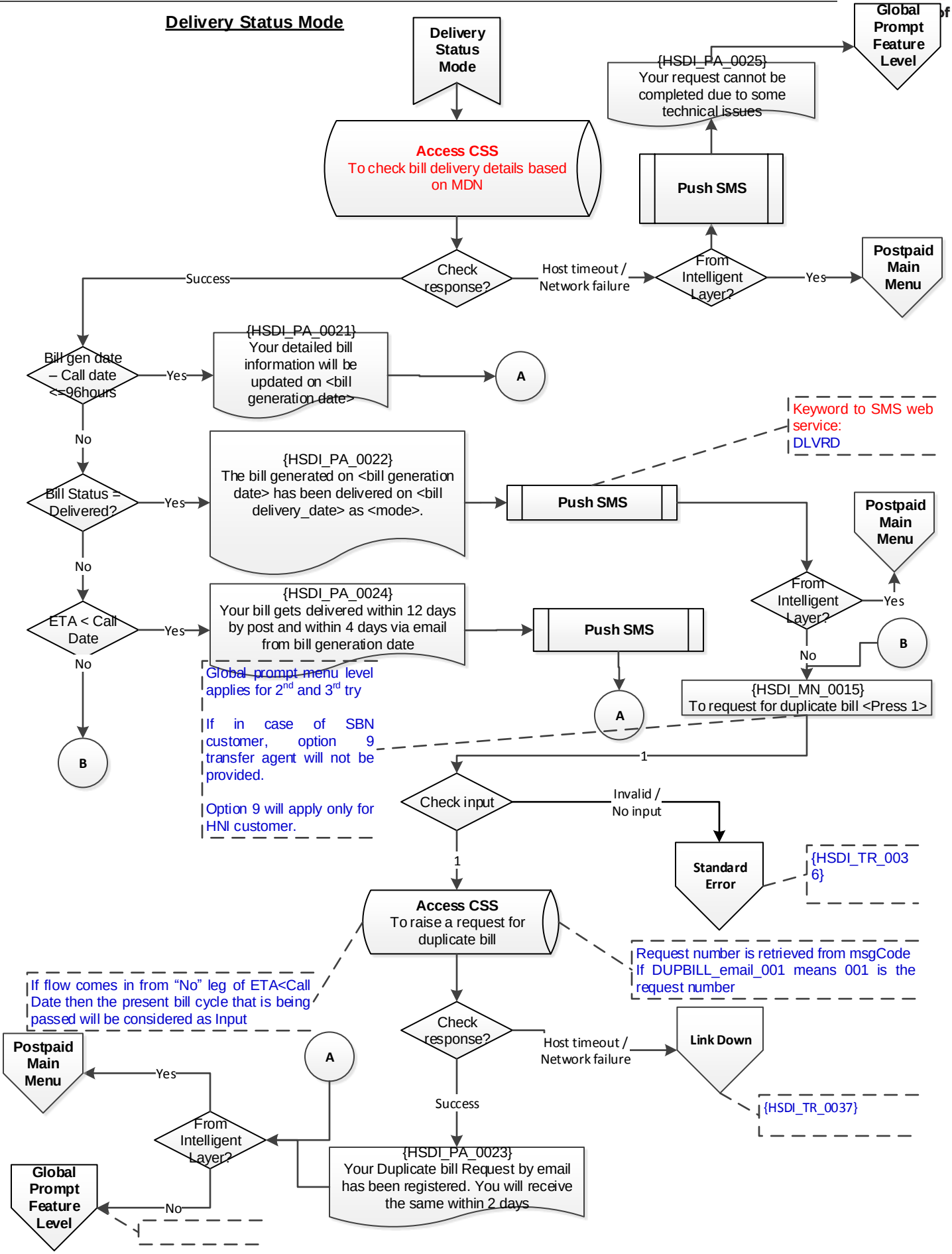
Bill n Payment Information



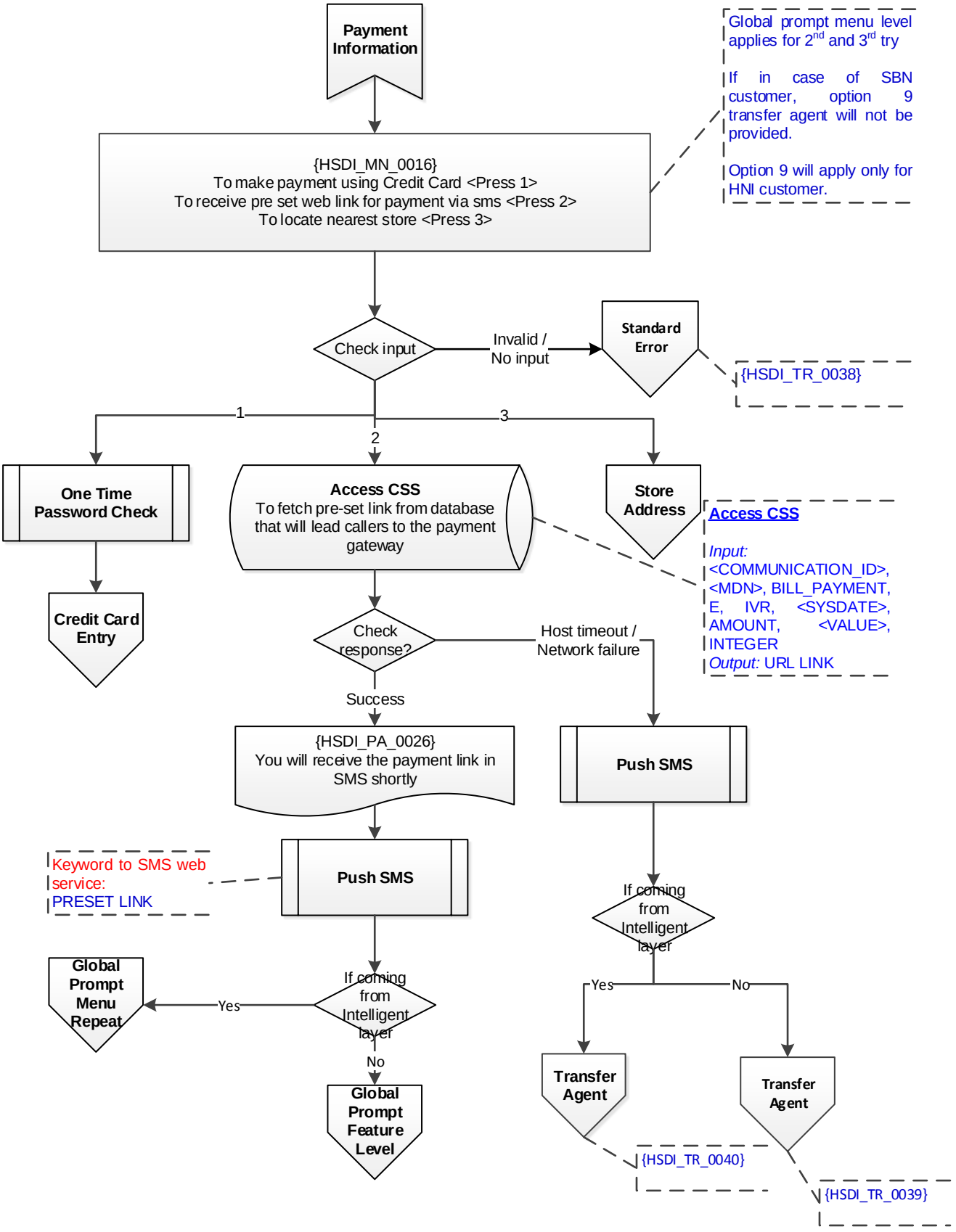
Check Bill


Check Bill
Global Prompt Feature Level
{HSDI_PA_0018} Your request cannot be completed due to some technical issues
Access CSS
Input: <COMMUNICATION_ID, <MDN>, BILL, E, IVR, <SYSDATE>
Output: ISSUE_DATE, INVOICE_AMOUNT, ACCOUNT_BALANCE, PAYMENT_DUE_DATE
Access CSS
To check bill details
Push SMS
Postpaid Main Menu
Interaction
No
Check response?
Host timeout / Network failure
From Intelligent layer?
Yes
Flow from Interaction/ Event based
Success
From Event based Intelligent layer?
Yes
Event Based
No
Control returns to where it was invoked from
Bill Date - today's date <= 96hours
Yes
Call date is (>= Bill date + 2days) && (<= Bill date + 6days)
No
As confirmed by Amit: Bill Date + 12 days at the amximum
Period for how long this needs to be played as Intelligent Layer
Yes
No
{HSDI_PA_0019} Your last bill generated on <date> is <invoice_amount>. Total outstanding of <outstanding amount> is due by <outstanding date>. Your detailed Bill will be available by <bill date>.
{HSDI_PA_0020} Your last bill generated on <date> is <amount>. Total outstanding of <outstanding amount> is due by <outstanding date>.
Push SMS
Keyword to SMS web service: CHKBIL
From Intelligent layer?
Yes
Postpaid Main Menu
No
Global prompt menu level applies for 2nd and 3rd try
{HSDI_MN_0014} To make online payment and to get information about other available payment modes <Press 1> To check bill delivery status <Press 2>
If in case of SBN customer, option 9 transfer agent will not be provided.
Option 9 will apply only for HNI customer.
Check input
Invalid / No input
Standard Error
1
2
{HSDI_TR_0035}
Payment Information
Delivery Status Mode

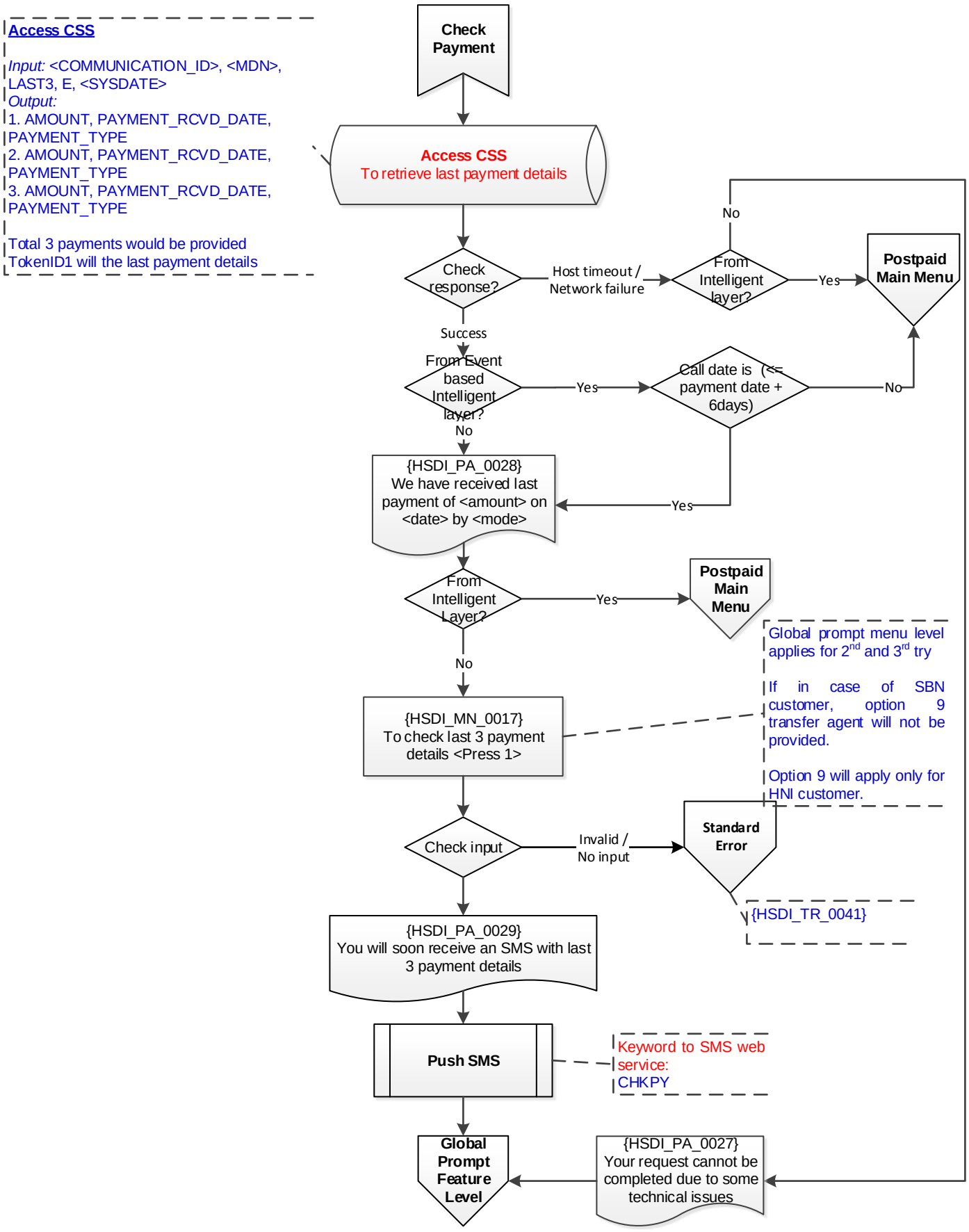
Delivery Status Mode



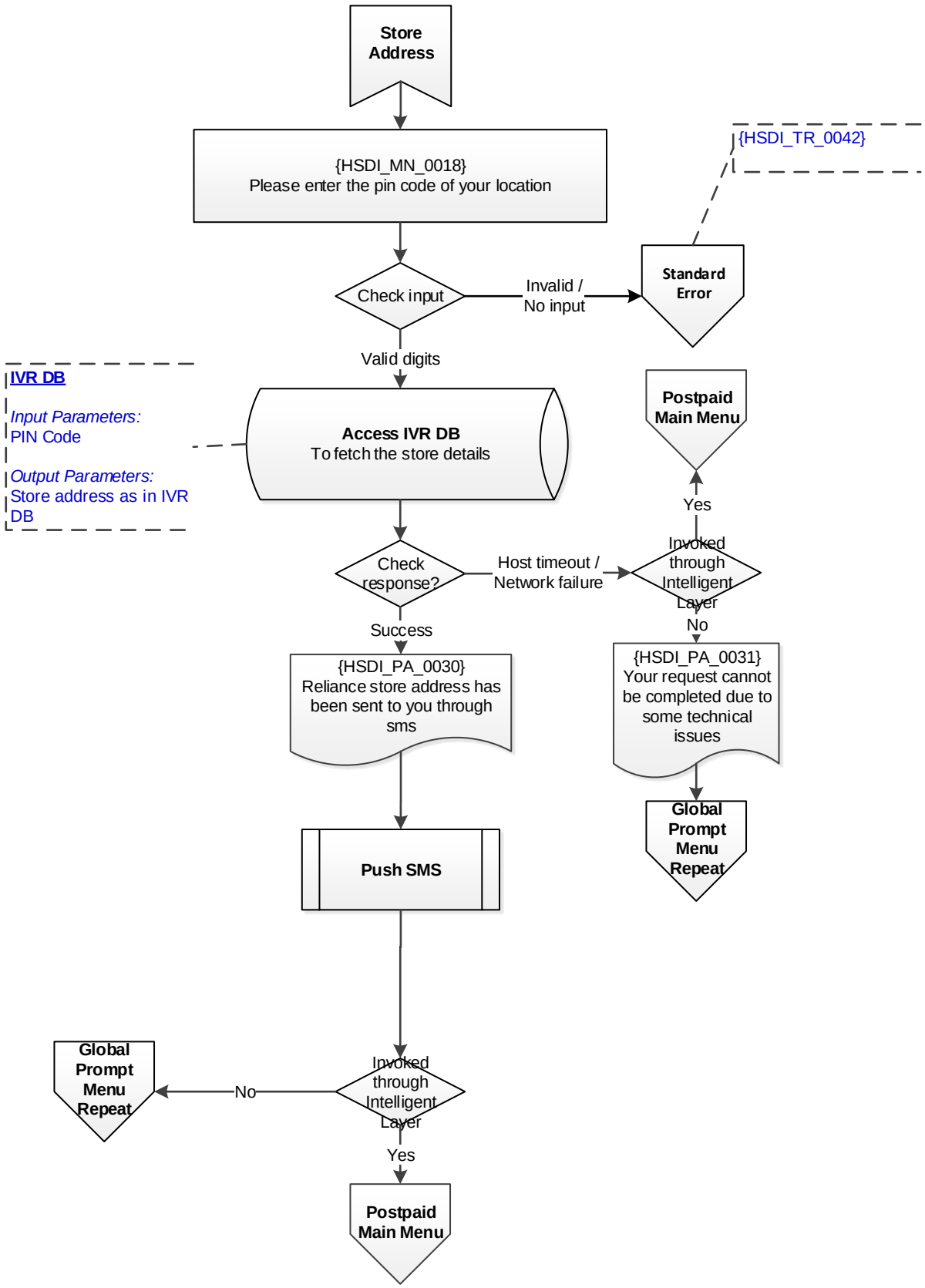
Payment Information



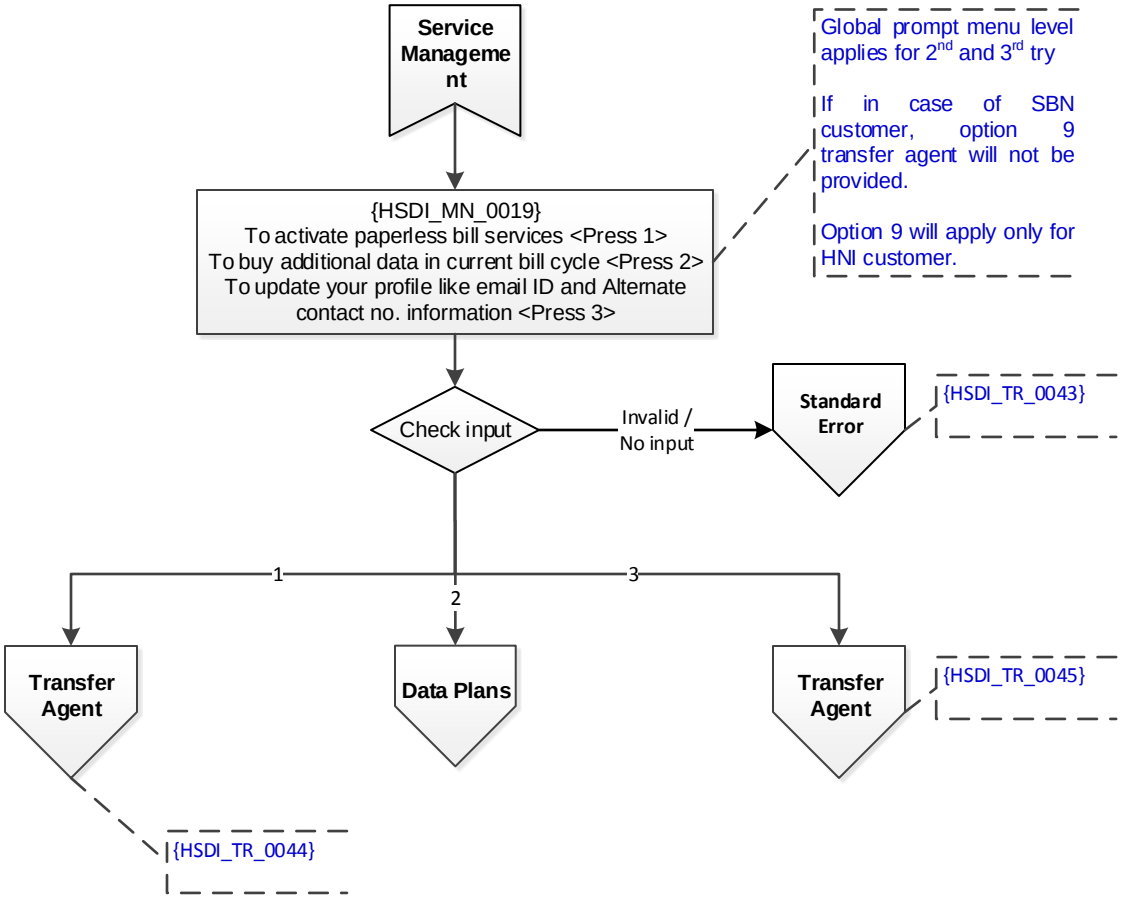
Check Payment



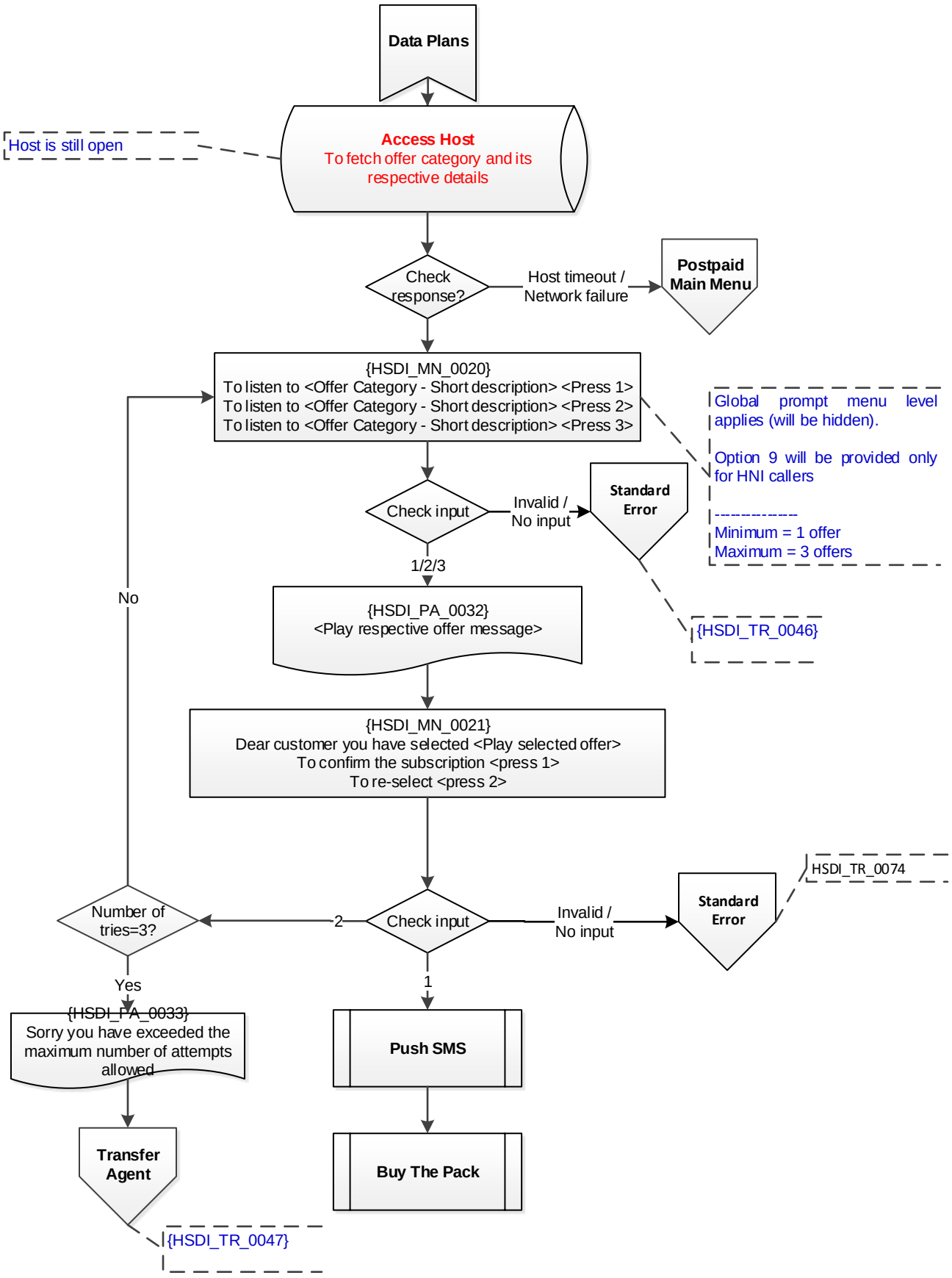
Store Address



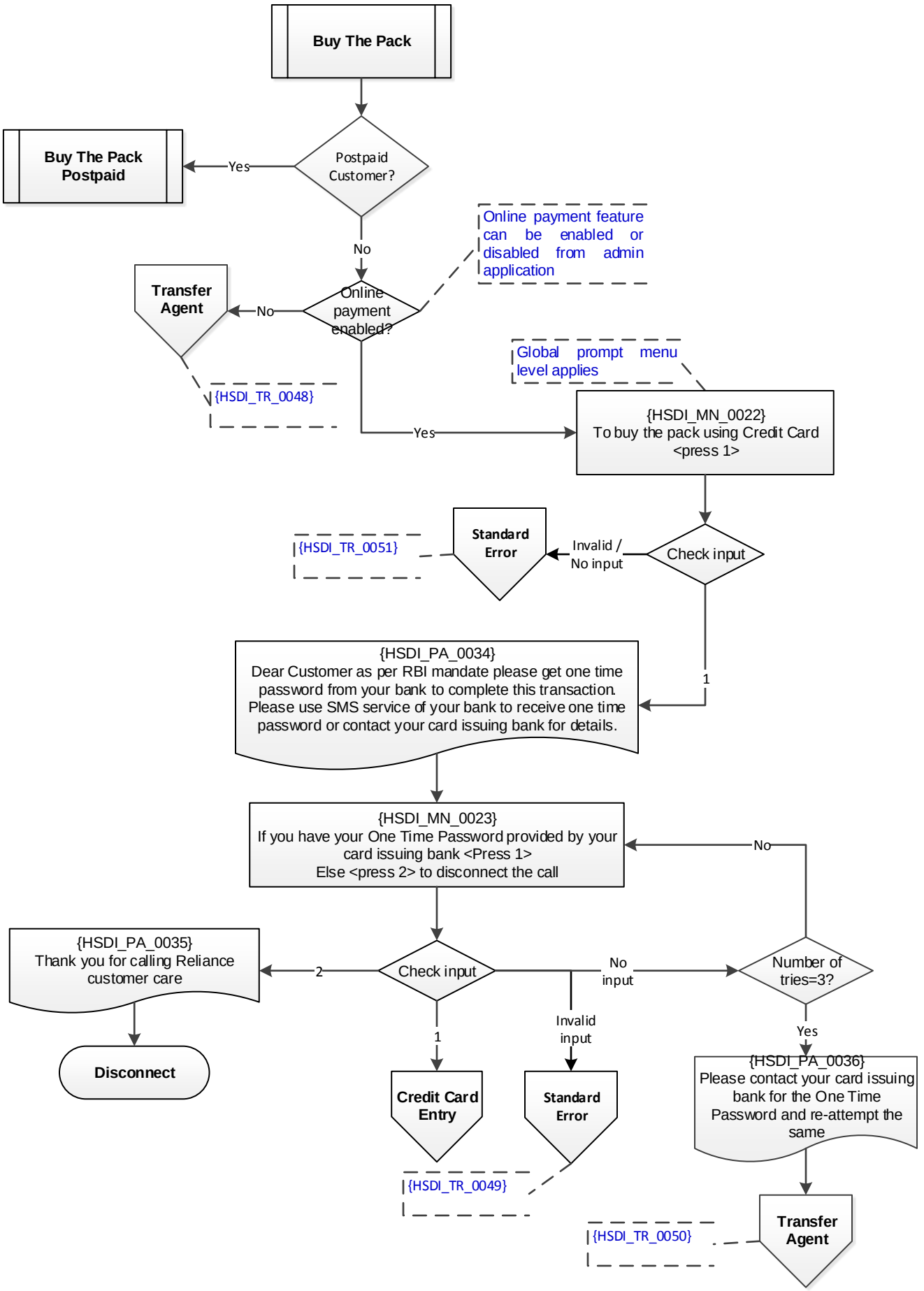
Service Management



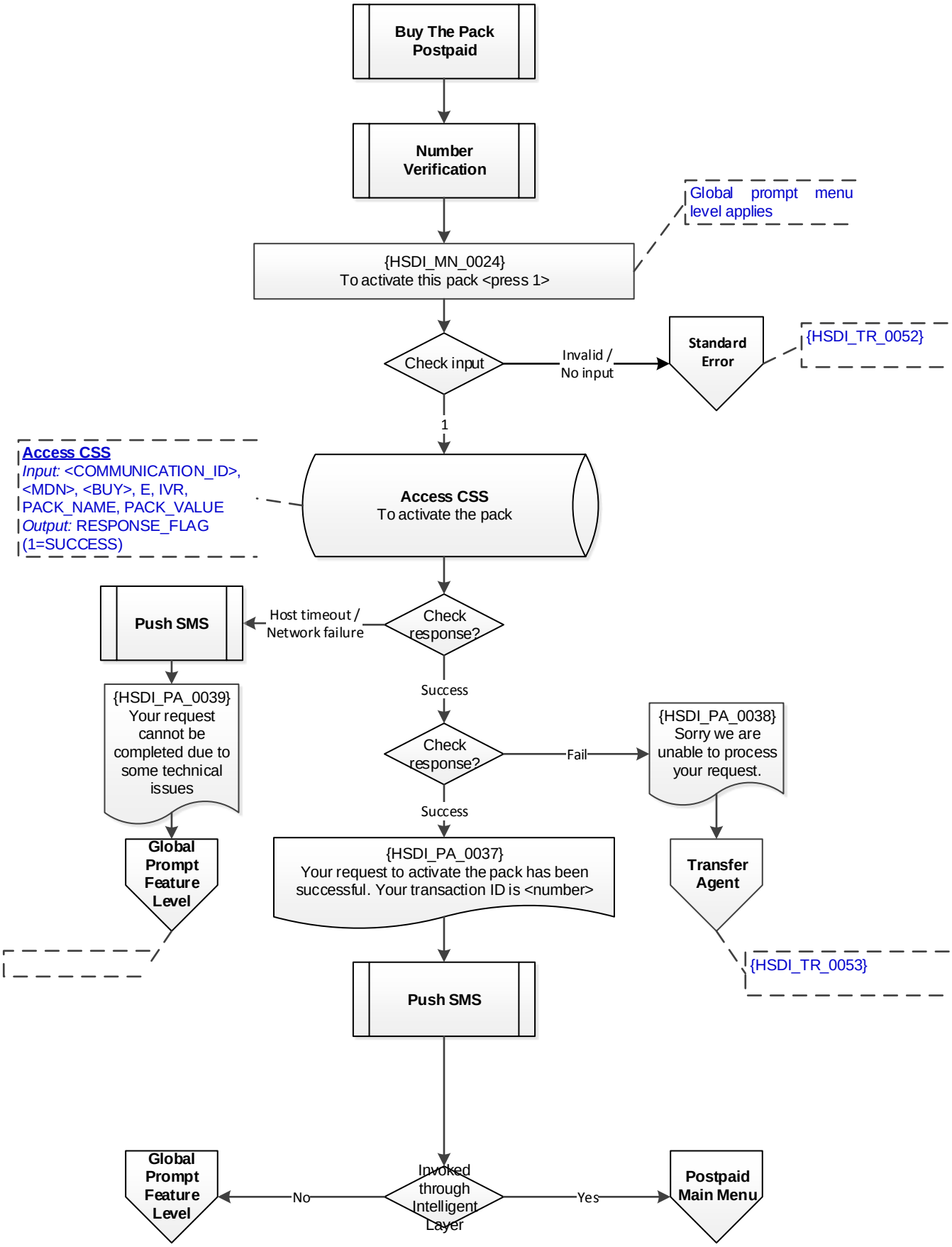
Data Plans


Data Plans
Access Host
To fetch offer category and its respective details
Host is still open
Check response?
Host timeout / Network failure
Postpaid Main Menu
{HSDI_MN_0020}
To listen to <Offer Category - Short description> <Press 1>
To listen to <Offer Category - Short description> <Press 2>
To listen to <Offer Category - Short description> <Press 3>
Global prompt menu level applies (will be hidden).
Option 9 will be provided only for HNI callers
Minimum = 1 offer
Maximum = 3 offers
Check input
Invalid / No input
Standard Error
{HSDI_TR_0046}
1/2/3
No
{HSDI_PA_0032}
<Play respective offer message>
{HSDI_MN_0021}
Dear customer you have selected <Play selected offer>
To confirm the subscription <press 1>
To re-select <press 2>
HSDI_TR_0074
Number of tries=3?
2
Check input
Invalid / No input
Standard Error
Yes
1
{HSDI_PA_0033}
Sorry you have exceeded the maximum number of attempts allowed
Push SMS
Transfer Agent
Buy The Pack
{HSDI_TR_0047}

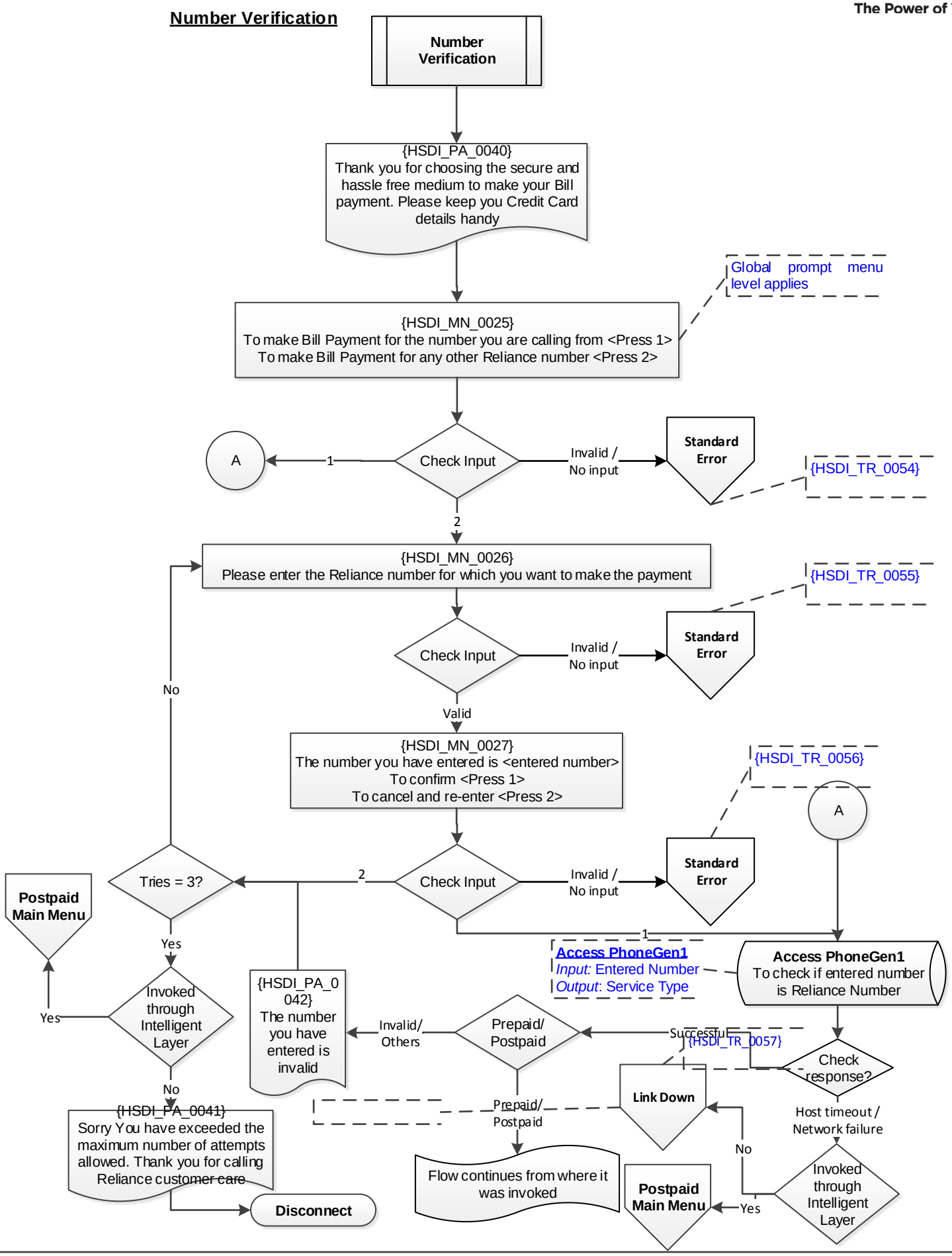
Buy The Pack


Buy The Pack
Buy The Pack
Postpaid Customer?
Yes
Buy The Pack Postpaid
No
Online payment feature can be enabled or disabled from admin application
Online payment enabled?
No
Transfer Agent
{HSDI_TR_0048}
Yes
Global prompt menu level applies
{HSDI_MN_0022}
To buy the pack using Credit Card <press 1>
Check input
Invalid / No input
Standard Error
{HSDI_TR_0051}
1
{HSDI_PA_0034}
Dear Customer as per RBI mandate please get one time password from your bank to complete this transaction. Please use SMS service of your bank to receive one time password or contact your card issuing bank for details.
{HSDI_MN_0023}
If you have your One Time Password provided by your card issuing bank <Press 1>
Else <press 2> to disconnect the call
No
Number of tries=3?
No input
Check input
2
{HSDI_PA_0035}
Thank you for calling Reliance customer care
Disconnect
1
Credit Card Entry
Invalid input
Standard Error
Yes
{HSDI_PA_0036}
Please contact your card issuing bank for the One Time Password and re-attempt the same
{HSDI_TR_0049}
{HSDI_TR_0050}
Transfer Agent

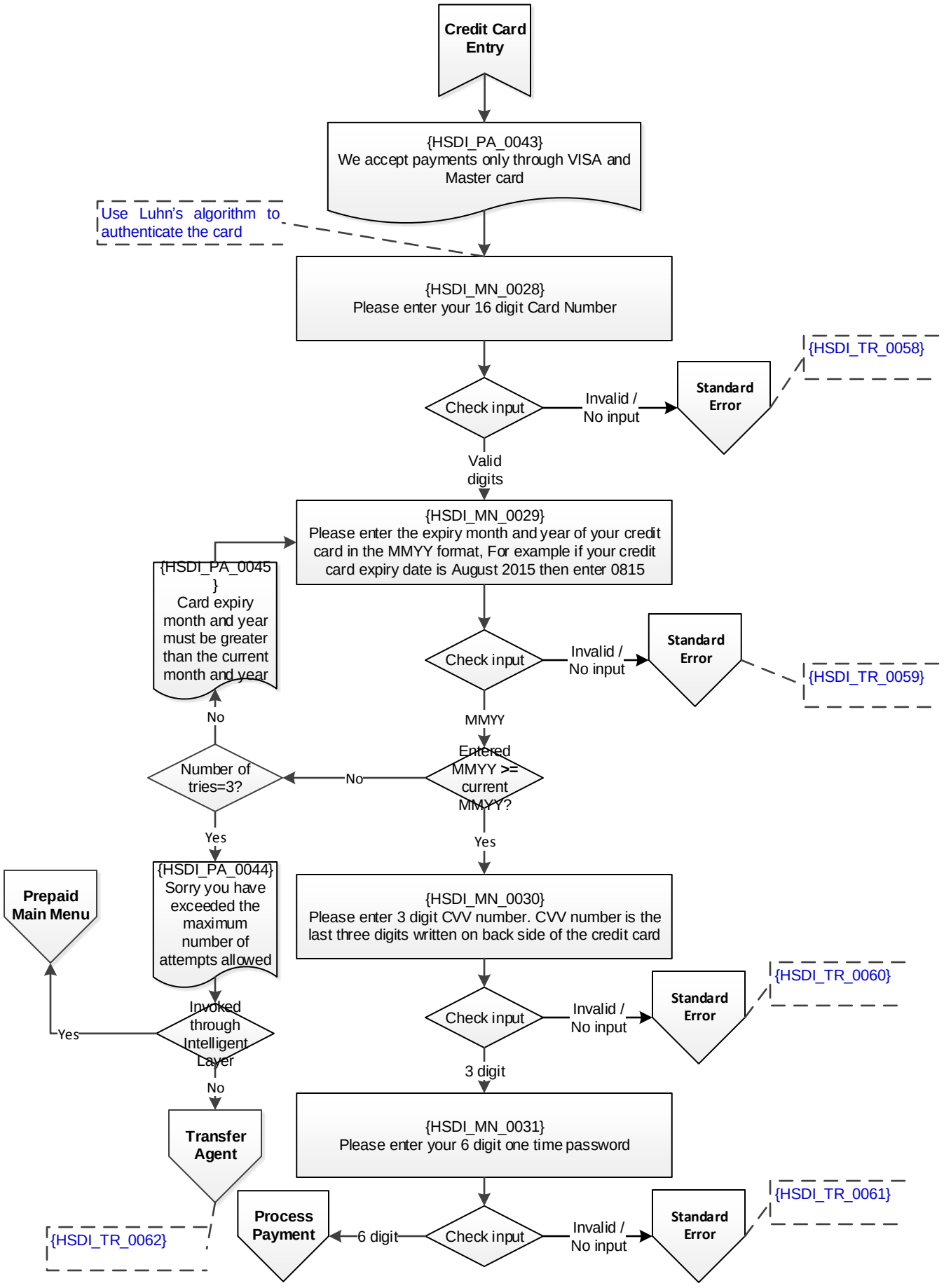
Buy The Pack Postpaid



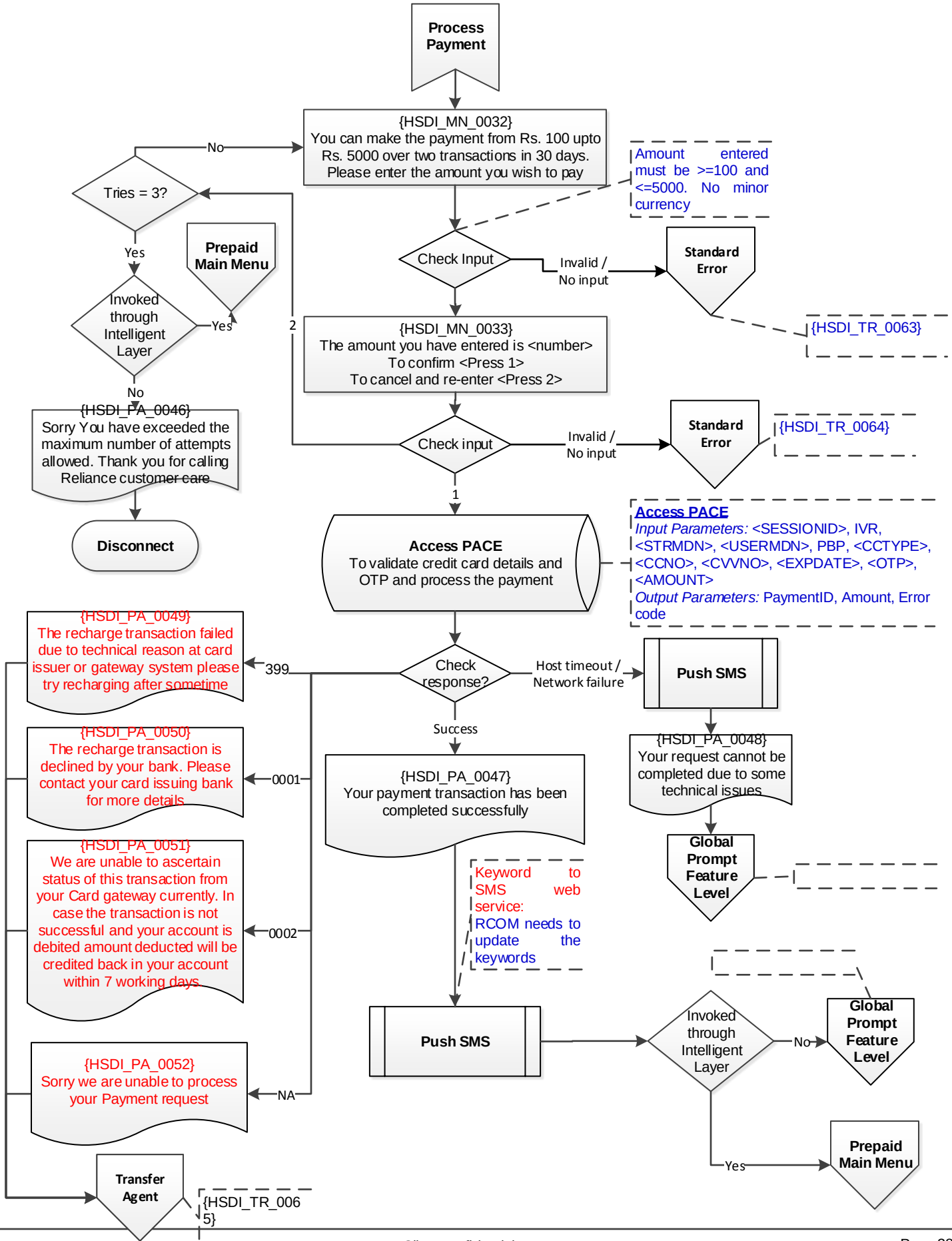
Number Verification



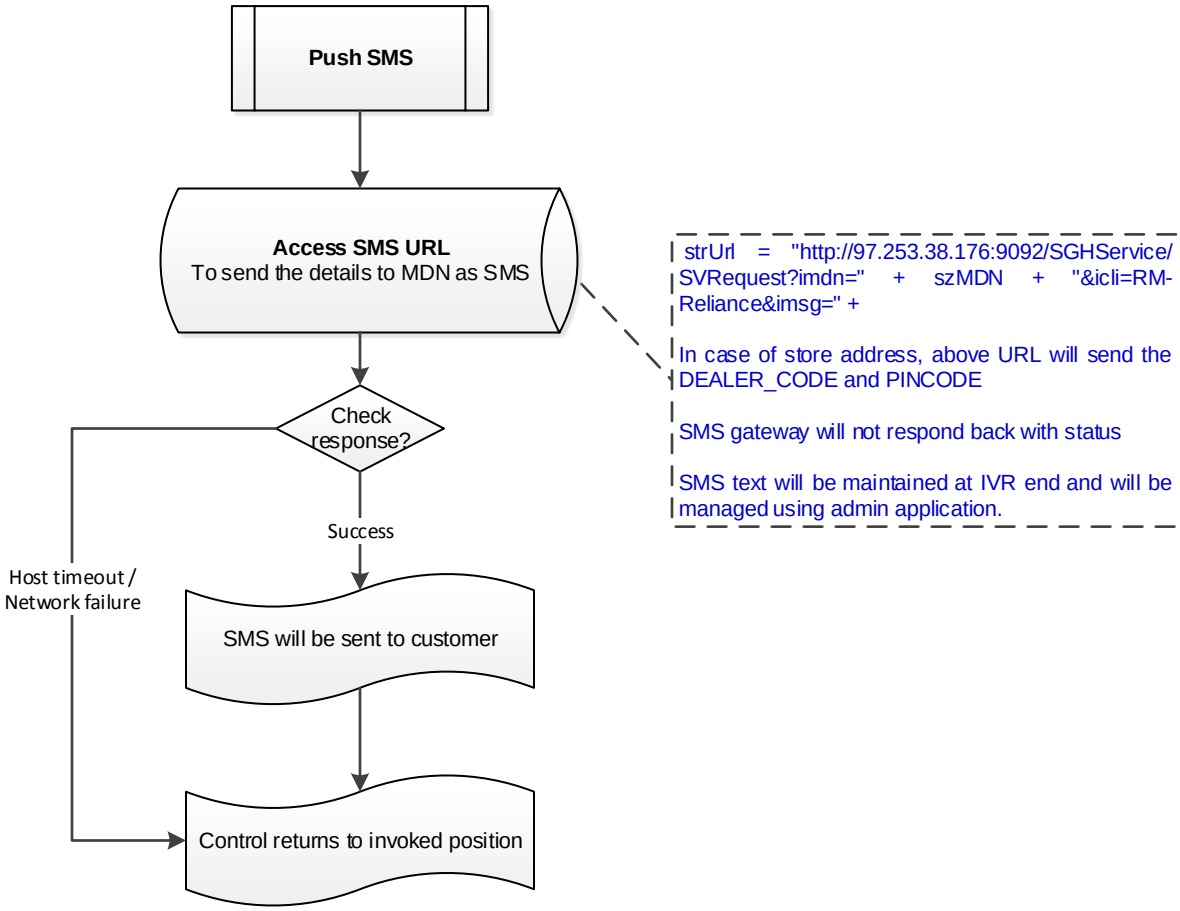
Credit Card Entry



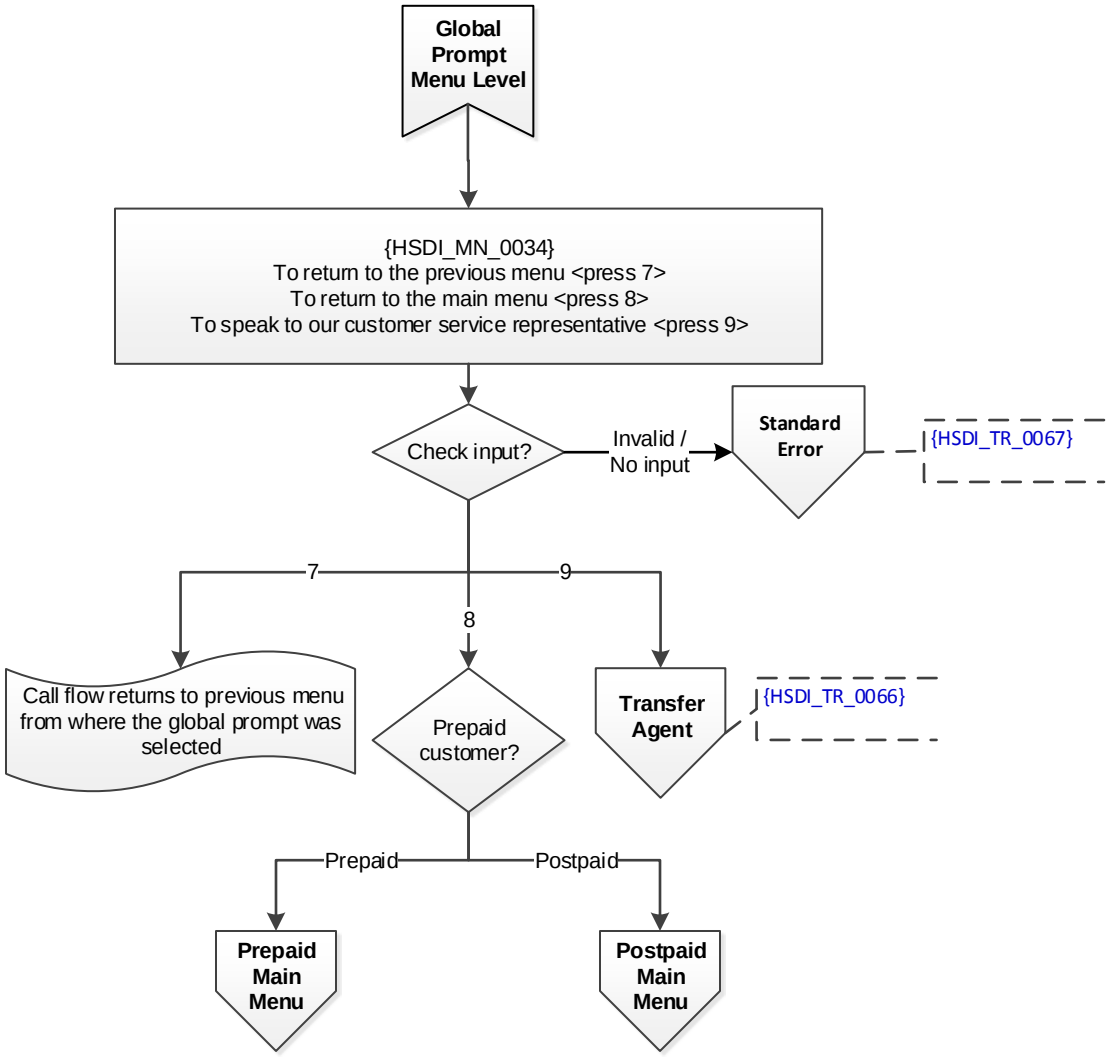
Process Payment



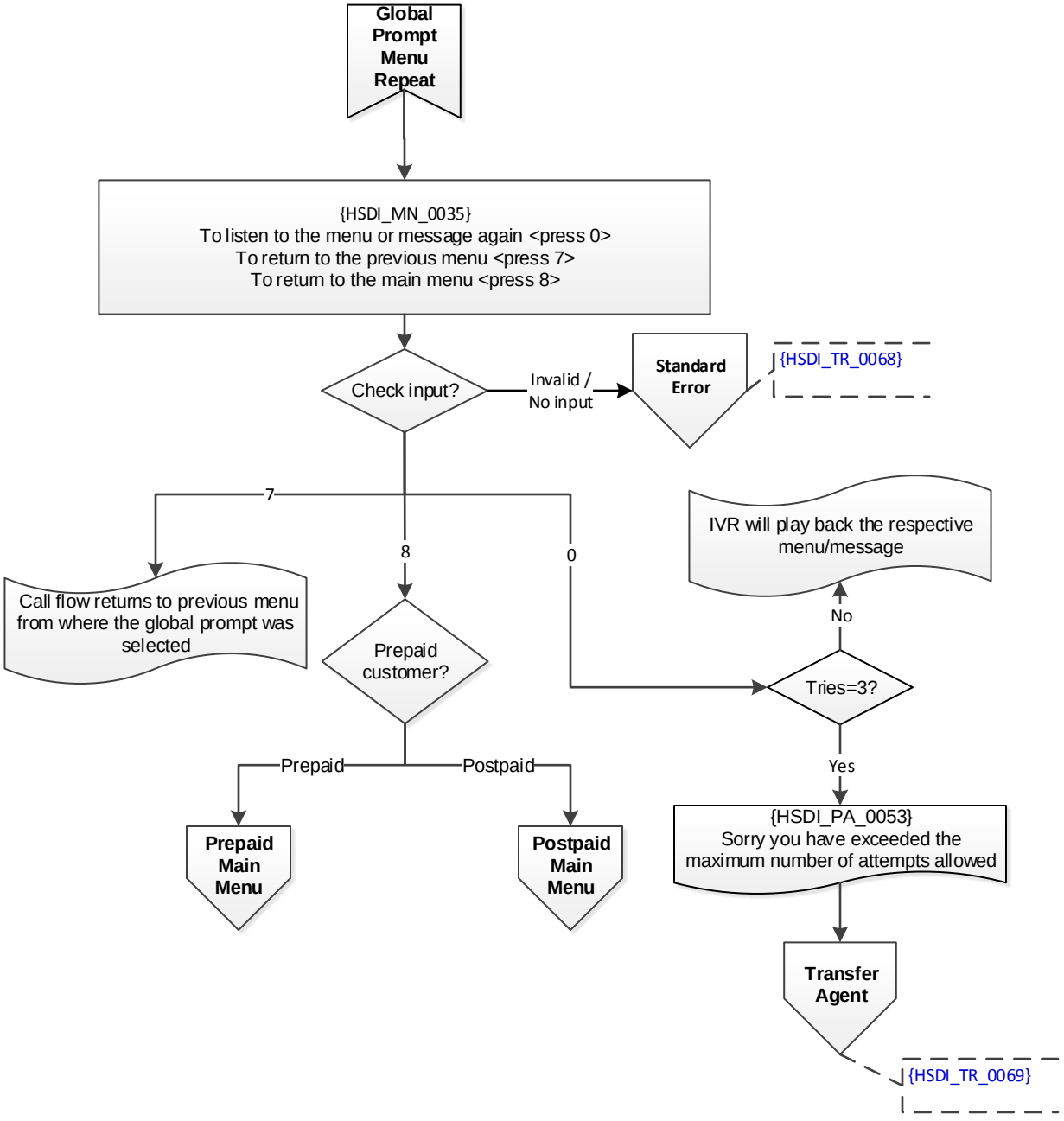
Push SMS


Push SMS
Access SMS URL
To send the details to MDN as SMS
Check response?
Success
Host timeout / Network failure
SMS will be sent to customer
Control returns to invoked position
strUrl = "http://97.253.38.176:9092/SGHService/SVRequest?imdn=" + szMDN + "&icli=RM-Reliance&imsg=" +
In case of store address, above URL will send the DEALER_CODE and PINCODE
SMS gateway will not respond back with status
SMS text will be maintained at IVR end and will be managed using admin application.

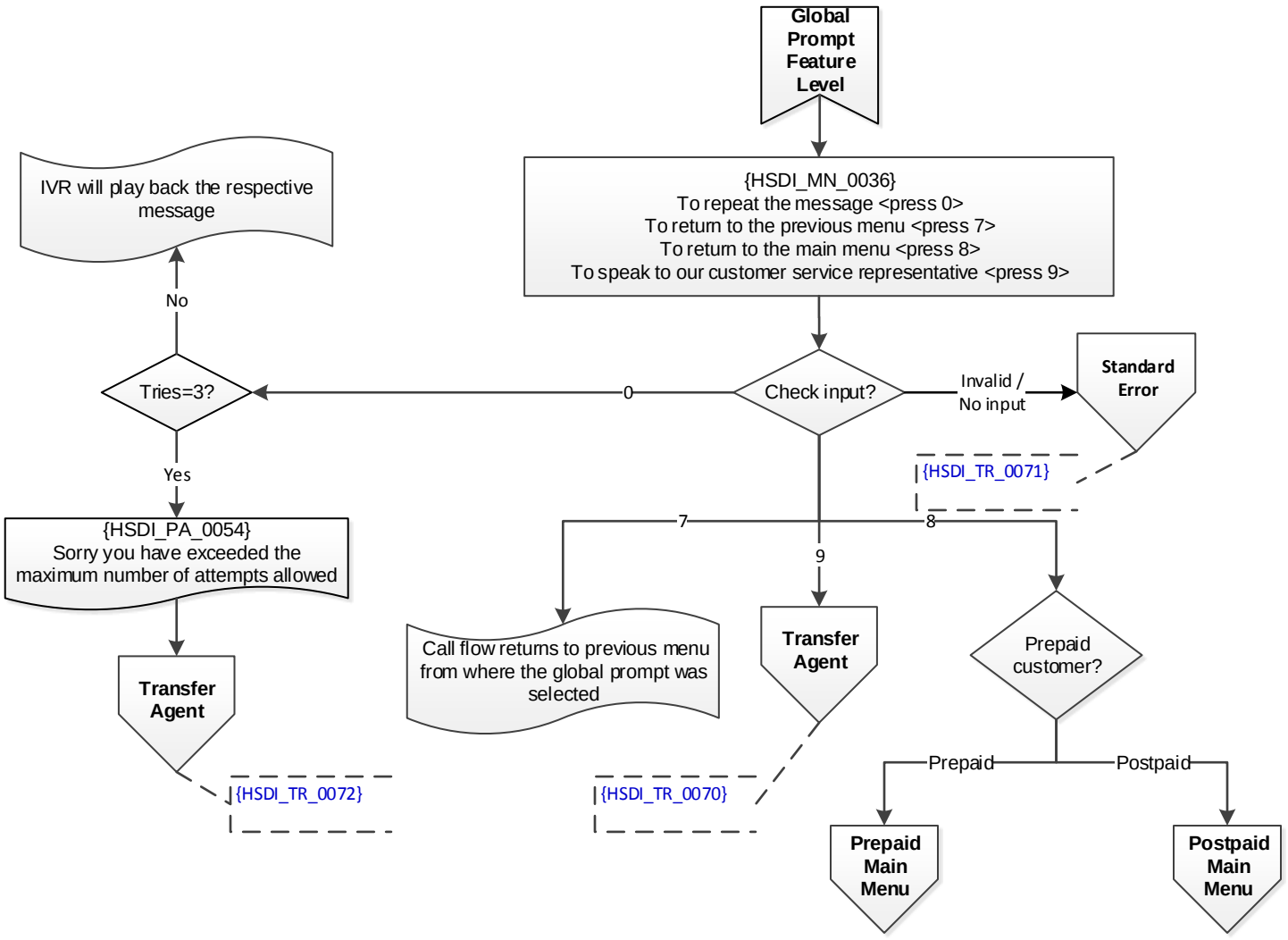
Global Prompt Menu Level



Global Prompt Menu Level

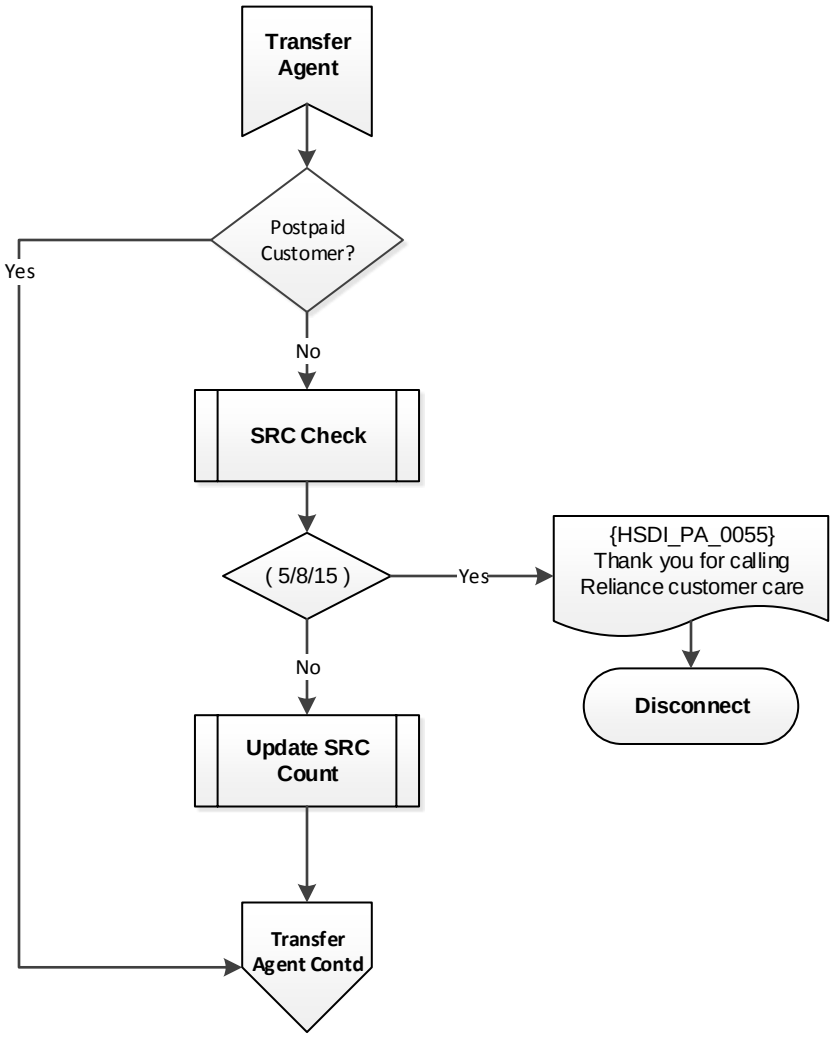


Global Prompt Feature Level

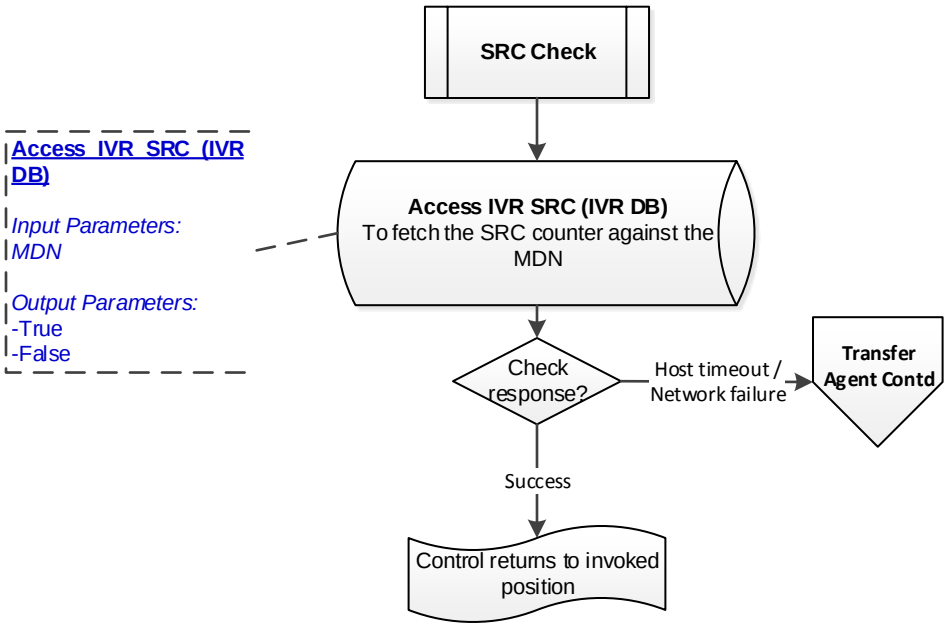


IVR call variables:
1. ANI
2. DNIS
3. Language selected
4. Last 5 menu accessed
5. Transfer reason code

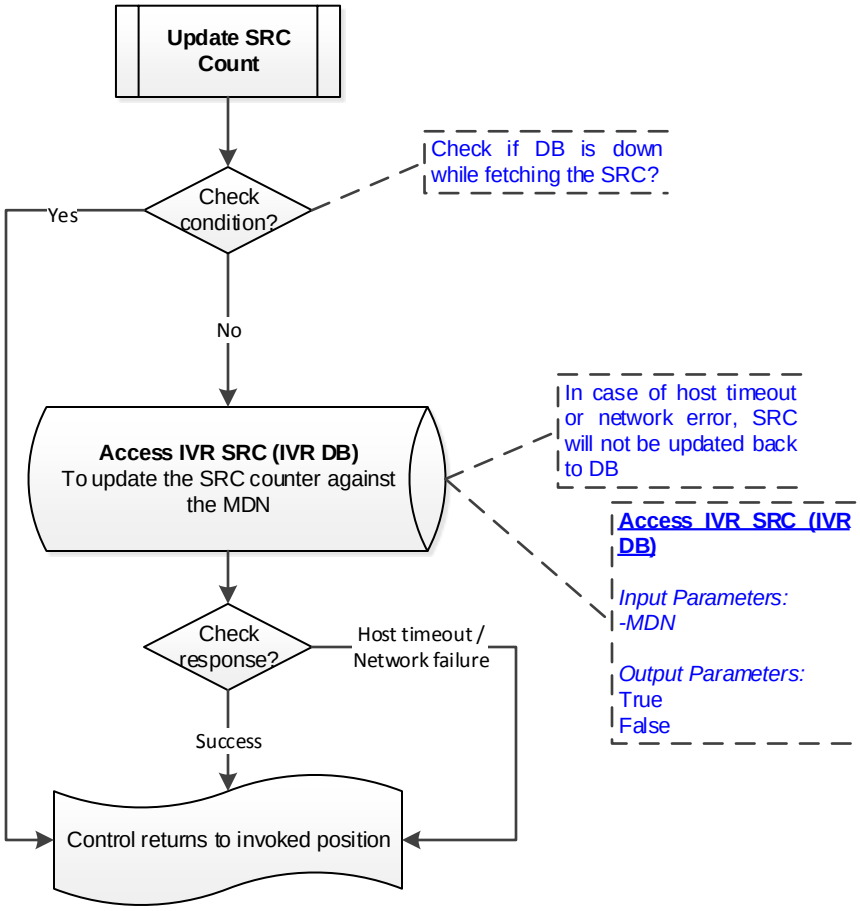
Transfer Agent



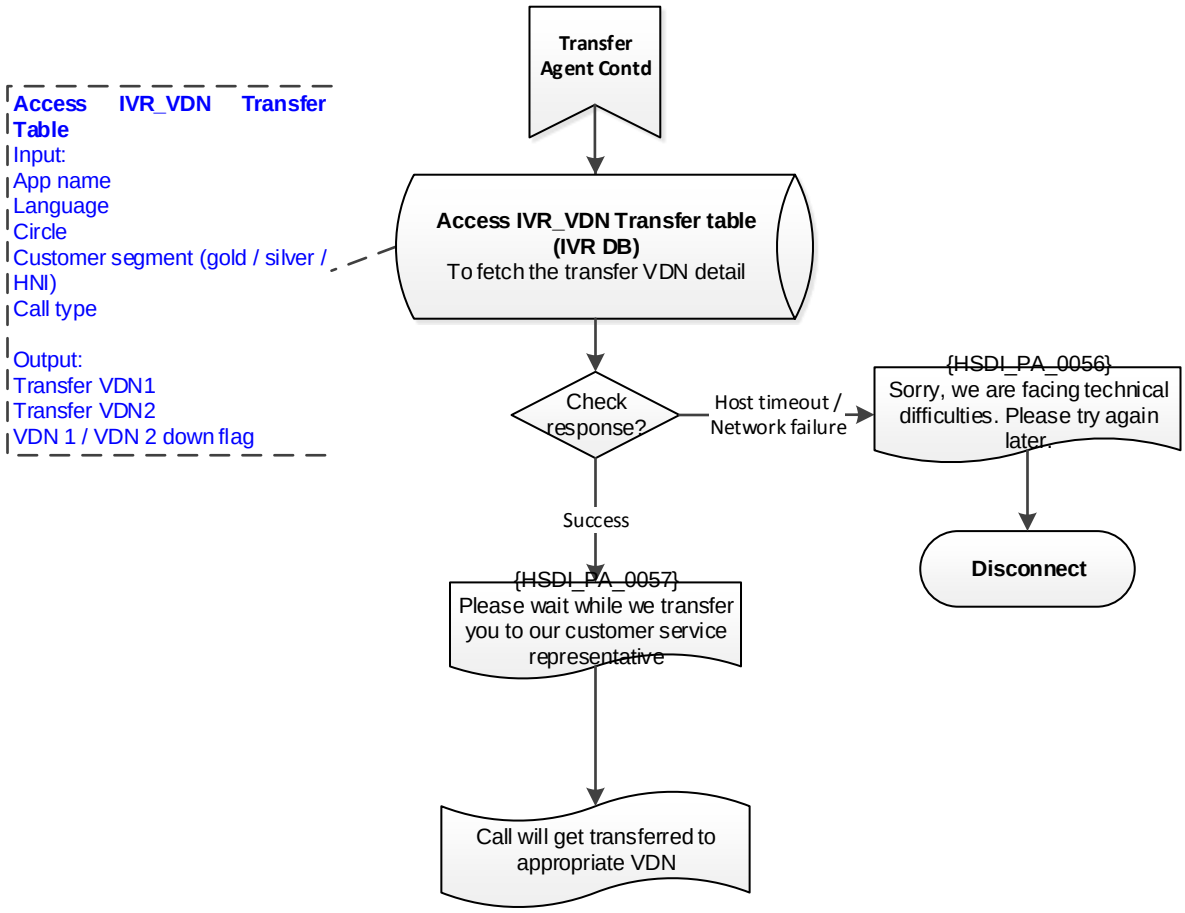
SRC Check


SRC Check
Access IVR SRC (IVR DB)
Input Parameters:
MDN
Output Parameters:
-True
-False
Access IVR SRC (IVR DB)
To fetch the SRC counter against the MDN
Check response?
Host timeout / Network failure
Transfer Agent Contd
Success
Control returns to invoked position

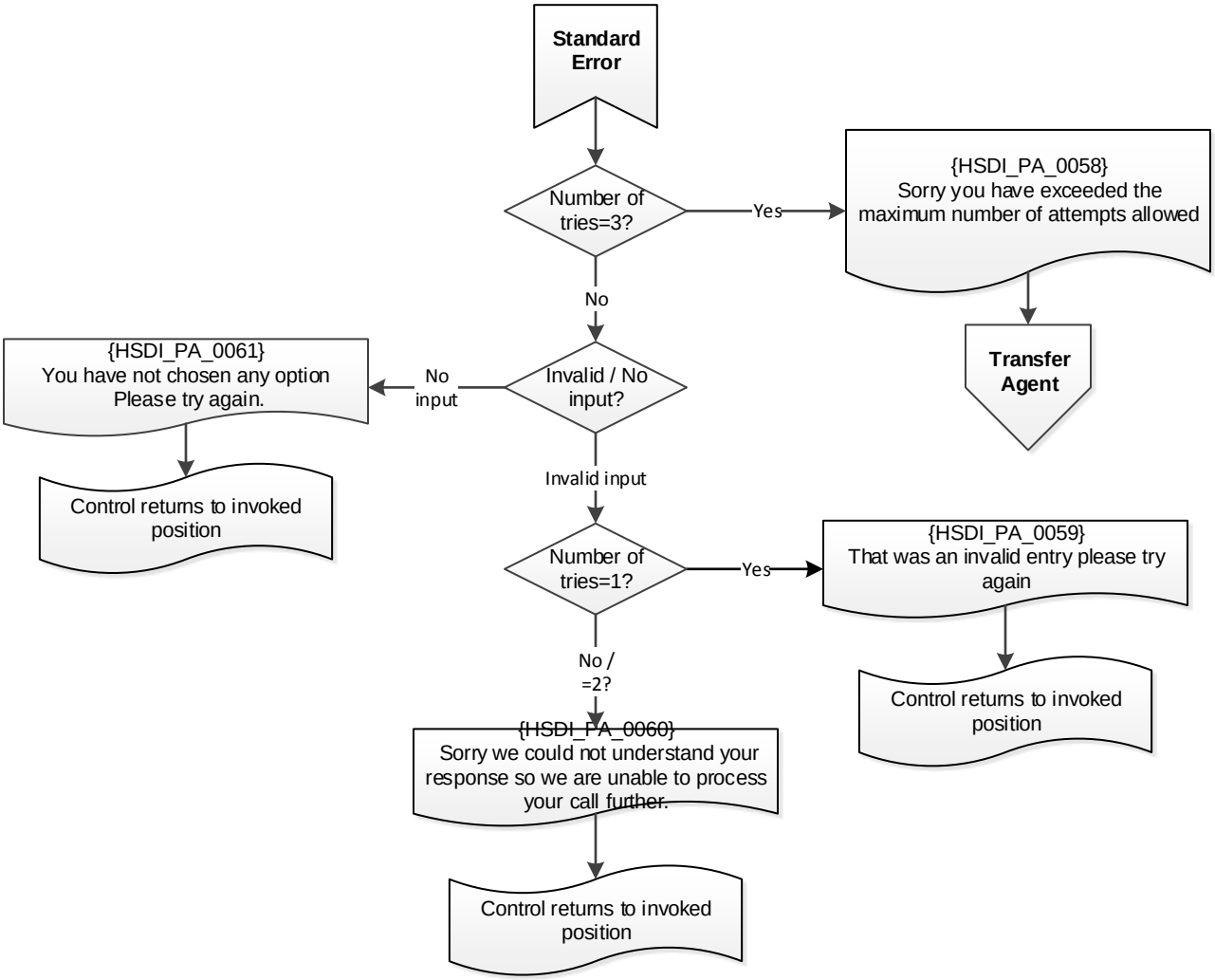
Update SRC Count



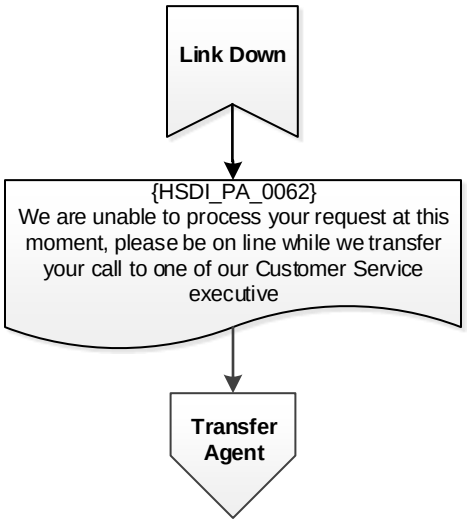
Transfer Agent Contd



Standard Error



Link Down


Link Down
{HSDI_PA_0062}
We are unable to process your request at this moment, please be on line while we transfer your call to one of our Customer Service executive
Transfer Agent