



# 222 CDMA Postpaid IVR Call Flow

Last updated on: Sep 27<sup>th</sup> 2016

Version: 1.7

### Version History

Version No / Date	Change Initiated By	Updated By	Summary of Changes
0.01 / Jan.29.2015	-	Daranivasan.A	Initial draft of the call flow
0.02 / Feb.10.2015	-	Daranivasan.A	<ul style="list-style-type: none"> <li>- Start(STT)               <ul style="list-style-type: none"> <li>* Retention List MDN Check leads to Transfer Agent</li> <li>* Birthday wish message updated</li> </ul> </li> <li>- Main Menu(MAM)               <ul style="list-style-type: none"> <li>* Updated Main Menu</li> </ul> </li> <li>- Account Information(ACI)               <ul style="list-style-type: none"> <li>* Updated Menu</li> <li>* Inserted 2 Push SMS as per clients request</li> <li>* Keyword for one push SMS was updated</li> </ul> </li> <li>- Unbilled n Credit information(UCI)               <ul style="list-style-type: none"> <li>* Access CSS host added for point 2</li> <li>* Inserted 2 Push SMS as per clients request</li> </ul> </li> <li>- Bill n Payment Information(BPI)               <ul style="list-style-type: none"> <li>* Response provided to the question and suggestion made</li> <li>* Instead of CSS, requested for table to update data</li> </ul> </li> <li>- Check Bill(CKB)               <ul style="list-style-type: none"> <li>* Instead of Credit Card Entry flow, connected the flow to Payment Information(PYI)</li> </ul> </li> <li>- Delivery Status Mode(DSM)               <ul style="list-style-type: none"> <li>* Updated Prompts</li> <li>* Inserted a prompt as per the request for duplicate bill request</li> </ul> </li> <li>- Payment Information(PYI)               <ul style="list-style-type: none"> <li>* Instead of Global Menu (PFL) it will be forwarded to Global Menu (PMR)</li> </ul> </li> <li>- Get GPRS Settings(GPRS)               <ul style="list-style-type: none"> <li>* Offer configuration removed as per request</li> <li>* Instead of Offer prompt, directly connected to Push SMS as per feedback</li> </ul> </li> <li>- Products, Offers &amp; Services (POS)               <ul style="list-style-type: none"> <li>* Menu Updated</li> </ul> </li> <li>- Data Plans(DAPL)               <ul style="list-style-type: none"> <li>* Response Provided</li> </ul> </li> <li>- Buy the Pack(BTP)               <ul style="list-style-type: none"> <li>* Flow changed as per the provided excel</li> </ul> </li> <li>- Pay Using Core Balance(PCB)               <ul style="list-style-type: none"> <li>* Removed</li> </ul> </li> <li>- Credit Card Entry(CCE)               <ul style="list-style-type: none"> <li>* Removed Amex Card</li> <li>* One Time Password Check(OTPC) included as per RBI rules</li> <li>* Response provided for the feedback</li> </ul> </li> <li>- Process Payment(PRP)               <ul style="list-style-type: none"> <li>* Inserted a failure status to Transfer Agent</li> </ul> </li> <li>- Change Language(CHL)               <ul style="list-style-type: none"> <li>* Do Not Disturb Flow has been removed</li> <li>* 3rd Language option was removed</li> </ul> </li> <li>- Credit Card Entry(CCE)               <ul style="list-style-type: none"> <li>* Removed Amex</li> <li>* Changed prompts</li> <li>* Response provided</li> </ul> </li> <li>- Process Payment(PRP)               <ul style="list-style-type: none"> <li>* Included logic for getting amount for payment</li> <li>* Inserted payment failure status</li> </ul> </li> <li>- Standard Error(STE)               <ul style="list-style-type: none"> <li>* Prompt change</li> </ul> </li> <li>- Link Down(LND)               <ul style="list-style-type: none"> <li>* Prompt Change</li> </ul> </li> </ul>

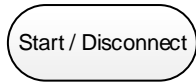
### Version History

Version No / Date	Change Initiated By	Updated By	Summary of Changes
0.03 / Feb.13.2015	Reliance	Daranivasan.A	<ul style="list-style-type: none"> <li>- Get GPRS Settings(GPRS)               <ul style="list-style-type: none"> <li>* Inserted a check for GPRS or CDMA</li> </ul> </li> <li>- Changed Intelligent Layer Flow based on updates provided</li> <li>- New Flow Pages               <ul style="list-style-type: none"> <li>* Service Request History</li> <li>* Interaction History</li> <li>* Event Based Information</li> <li>* Unbilled Information</li> <li>* Credit Information</li> <li>* Free Unit Information</li> <li>* Pay to promise (Called from Intelligent Layer alone)</li> </ul> </li> <li>- Check from whether the flow was invoked from Intelligent Layer               <ul style="list-style-type: none"> <li>* Check Bill</li> <li>* Unbilled Information</li> <li>* Credit Information</li> <li>* Free Unit Information</li> <li>* Delivery Status Mode</li> <li>* Check Payment</li> </ul> </li> </ul>
0.04 / Feb.18.2015	Servion	Daranivasan.A	<ul style="list-style-type: none"> <li>- One Time Password Check connection bug fixed</li> </ul>
0.05 / Feb.19.2015	Reliance	Daranivasan.A	<ul style="list-style-type: none"> <li>- VAS(VAS)               <ul style="list-style-type: none"> <li>* Replace “transfer to other IVRs” with message followed by Global Prompt</li> </ul> </li> </ul>
0.06 / Mar.05.2015	Servion	Daranivasan.A Karthikeyan.G	Incorporated changes after self review and internal review
0.07 / Mar.10.2015	Servion	Daranivasan.A	Incorporated internal review comments
0.08 / Mar.24.2015	Reliance	Daranivasan.A	Changes from Reliance Incorporated (Edits made in all pages) Included Dunning Check, Dunning Check Contd and Activate VAS Contd pages Removed Update VAS page
0.09 / Apr.09.2015	Reliance	Daranivasan.A	<ul style="list-style-type: none"> <li>- Inserted Host details which are closed as per 8<sup>th</sup> April 2015 (Host tracker)</li> <li>- Process Payment: Error codes updated for payment PACE gateway</li> </ul>
1.1 / Apr.10.2015	Reliance	Daranivasan.A	Baselining
1.11 / Apr.10.2015	Reliance	Daranivasan.A	Hot Flash – Include unique prompt node IDs for each Hot Flash occurrence locations Host interfaces added for the closed ones
1.2 / May.28.2015	Servion	Daranivasan.A	Re-base lining
1.3 / Feb.18.2016	Reliance	Tarun Jain	Call Disconnect for maximum no input in any menu

**Version History**

1.4 / June.17.2016	Rajesh Manjalkar	Yahya Rayyan	Intelligent layer change. All four interaction history items will play back to the customer.
1.5 / June.30.2016	Rajesh Manjalkar	Yahya Rayyan	Routing to main menu incase of RTS failure while fetching SR request.
1.6 / August.16.2016	Rajesh Manjalkar	Yahya Rayyan	Added playing back free units information to caller before sending push sms.
1.7 / Sep.26.2016	Rajesh Manjalkar	↓ Tarun Jain	Added missing playing back free units information to caller before sending push sms.

### Standard Call Flow Conventions



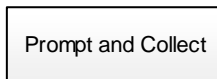
This shape represents the Start or End of the IVR Application



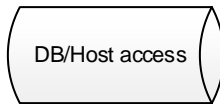
This shape represents speech announcements with out caller input



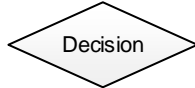
This shape represents any process that happens in the background



This shape represents the Menu option, the same shape also represents the collection of a string of digits (prompt and collect option).



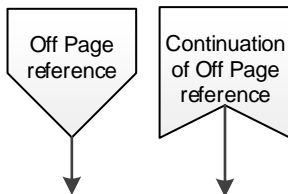
This shape represents the host or database access.



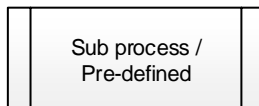
This shape represents a condition on which a decision is made to chose a branch in the call flow. It can be based on the input provided by the caller or the result from some external processor (a database operation).



This shape is a page connector which means the continuation of the flow in the same page.



This shape is a page connector which means the continuation of the flow is in another page.



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.

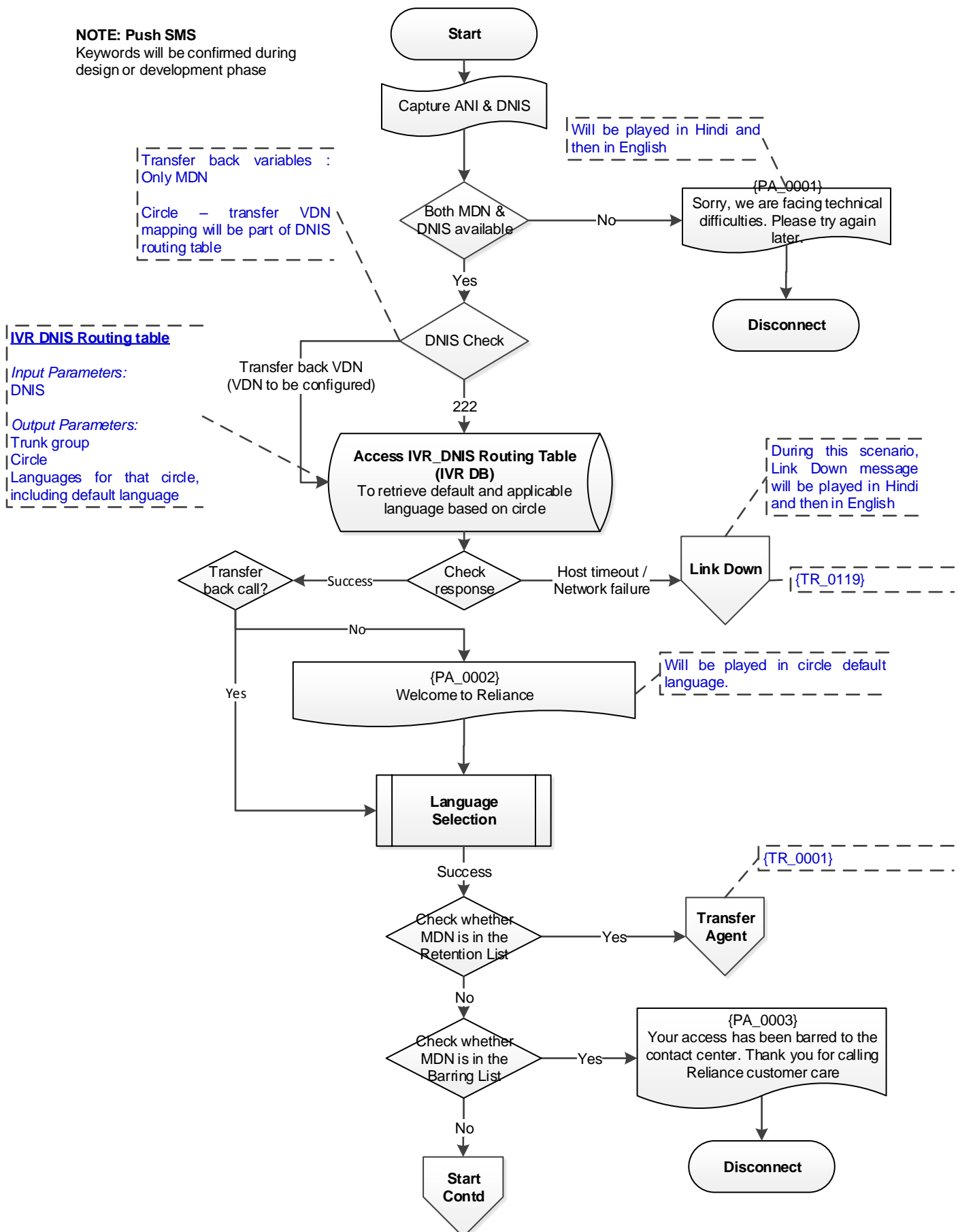
### Universal Business Rules

S.No.	Functionality	Description	Exceptions
1	Call Center Business Hours	24x7	
2	Language of Interaction	English, Hindi, Marathi, Punjabi, Telugu, Kannada, Malayalam, Tamil, Gujarati, Oriya, Bengali	Language selection will be dynamically offered based on the circle  Default language will vary for each circle as provided in the "RCOM Circle Mapping 2" sheet
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. (Minor currency will be read only if present) 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 (Menu level)  <b>Will be hidden</b>	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>	Global Prompts (Menu Level) will not apply for the following: Main Menu, Prompt & Collect, Confirmation Menu  Option 9 will be dynamically offered based on the customer category (HNI or regular).
13	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. Example: After credit card last 5 transaction announcement. Above exception applies for global prompt feature and menu repeat

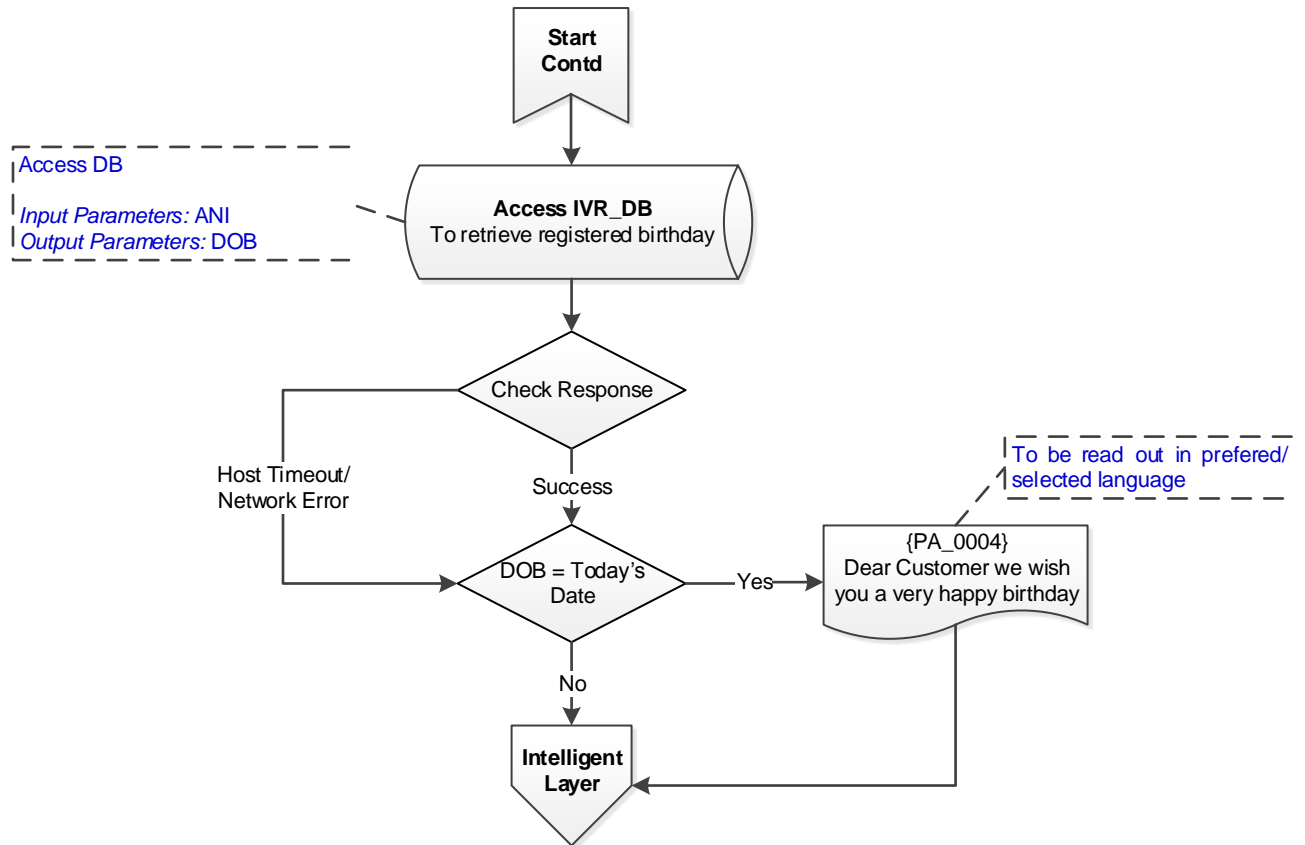
## Start

### NOTE: Push SMS

Keywords will be confirmed during design or development phase

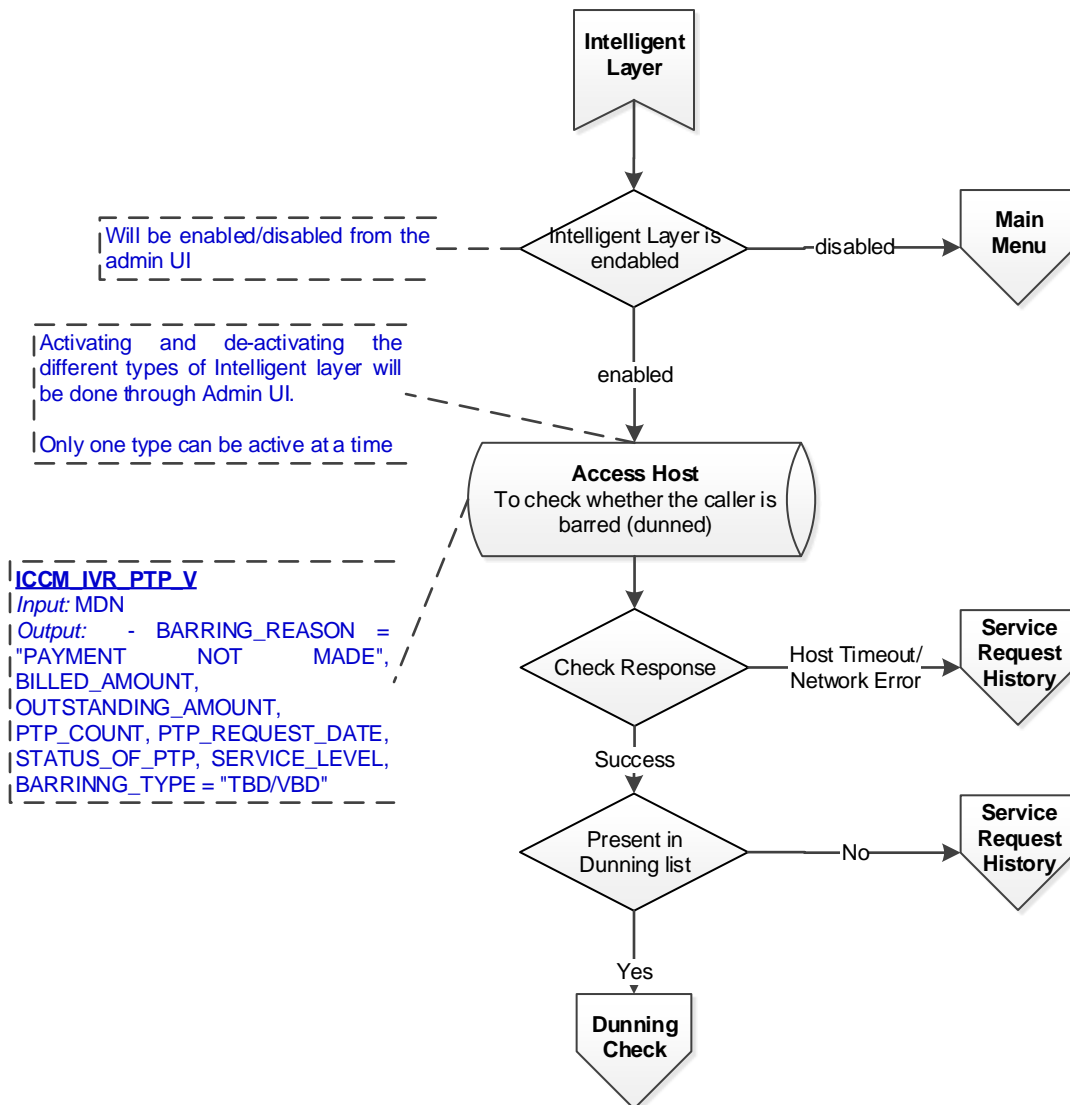


**Start Contd**

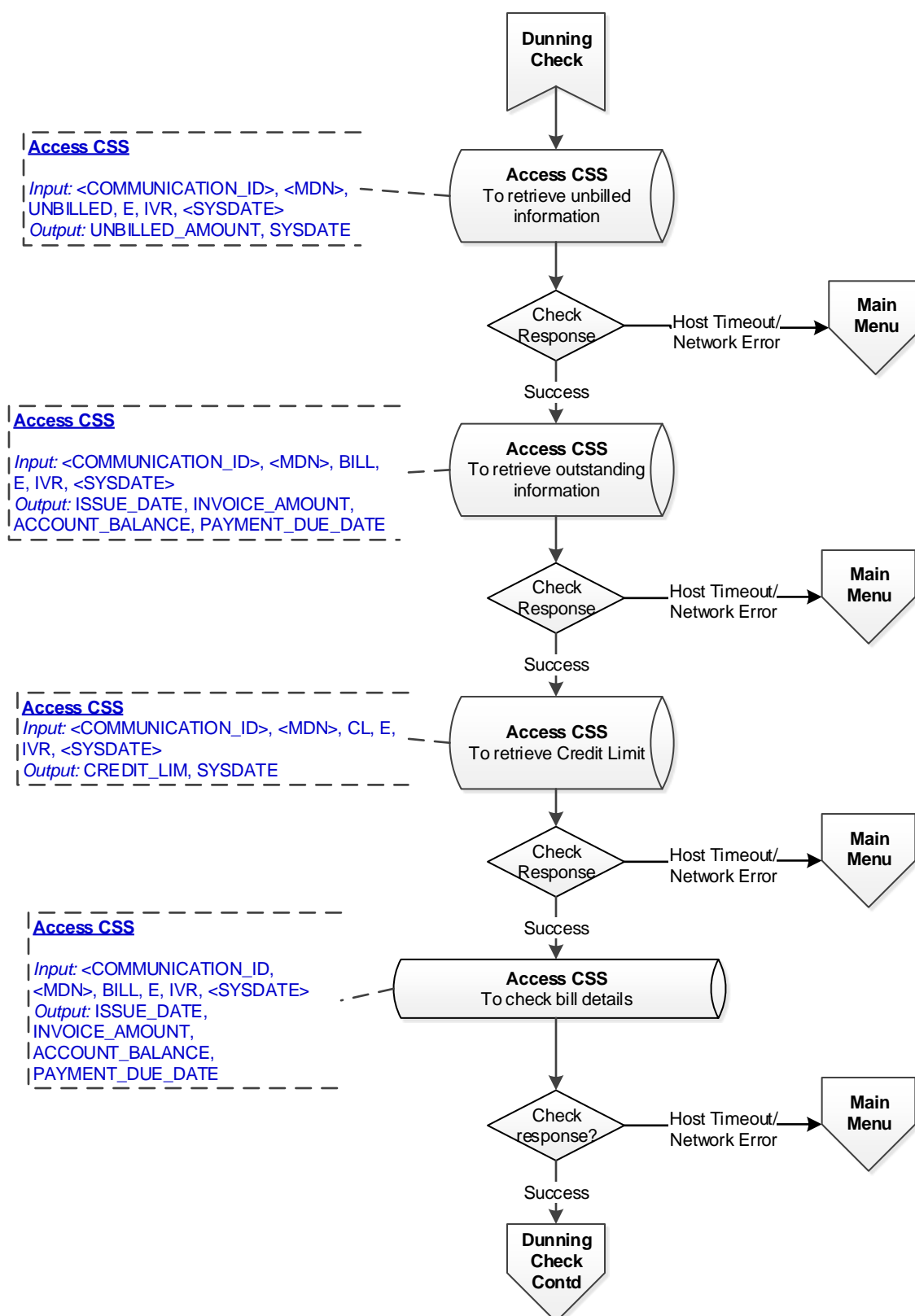




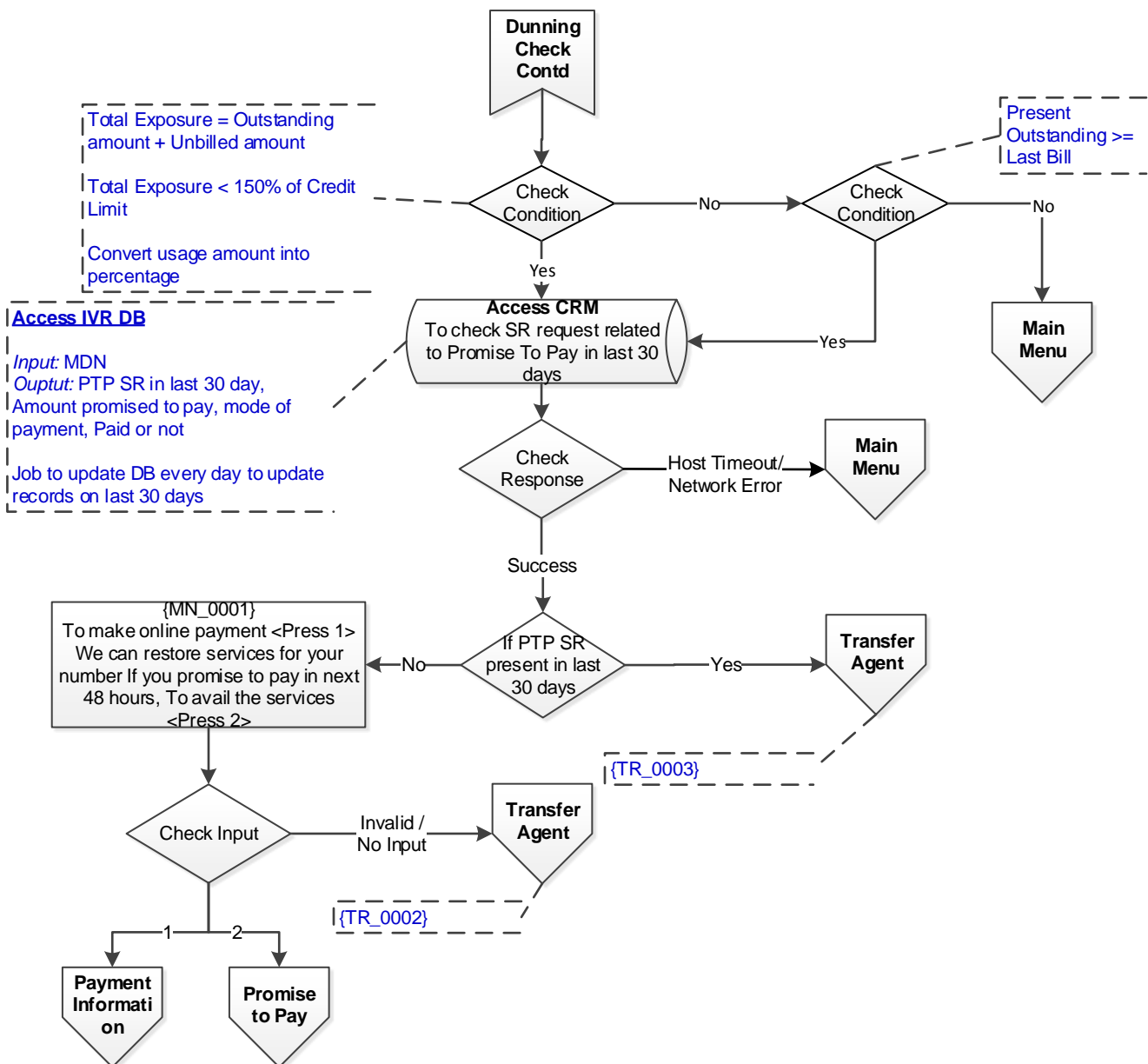
**Intelligent Layer**



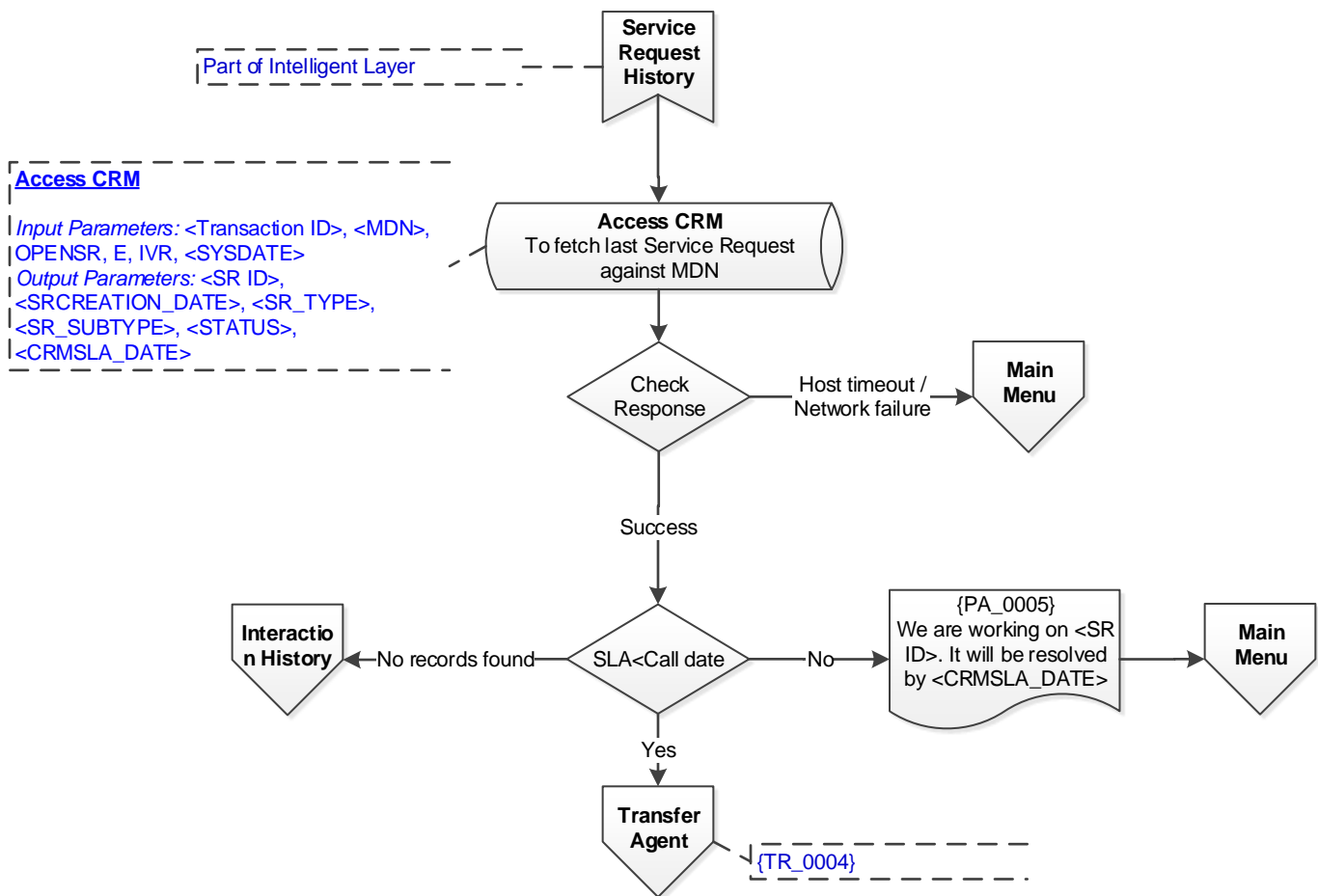
## Dunning Check



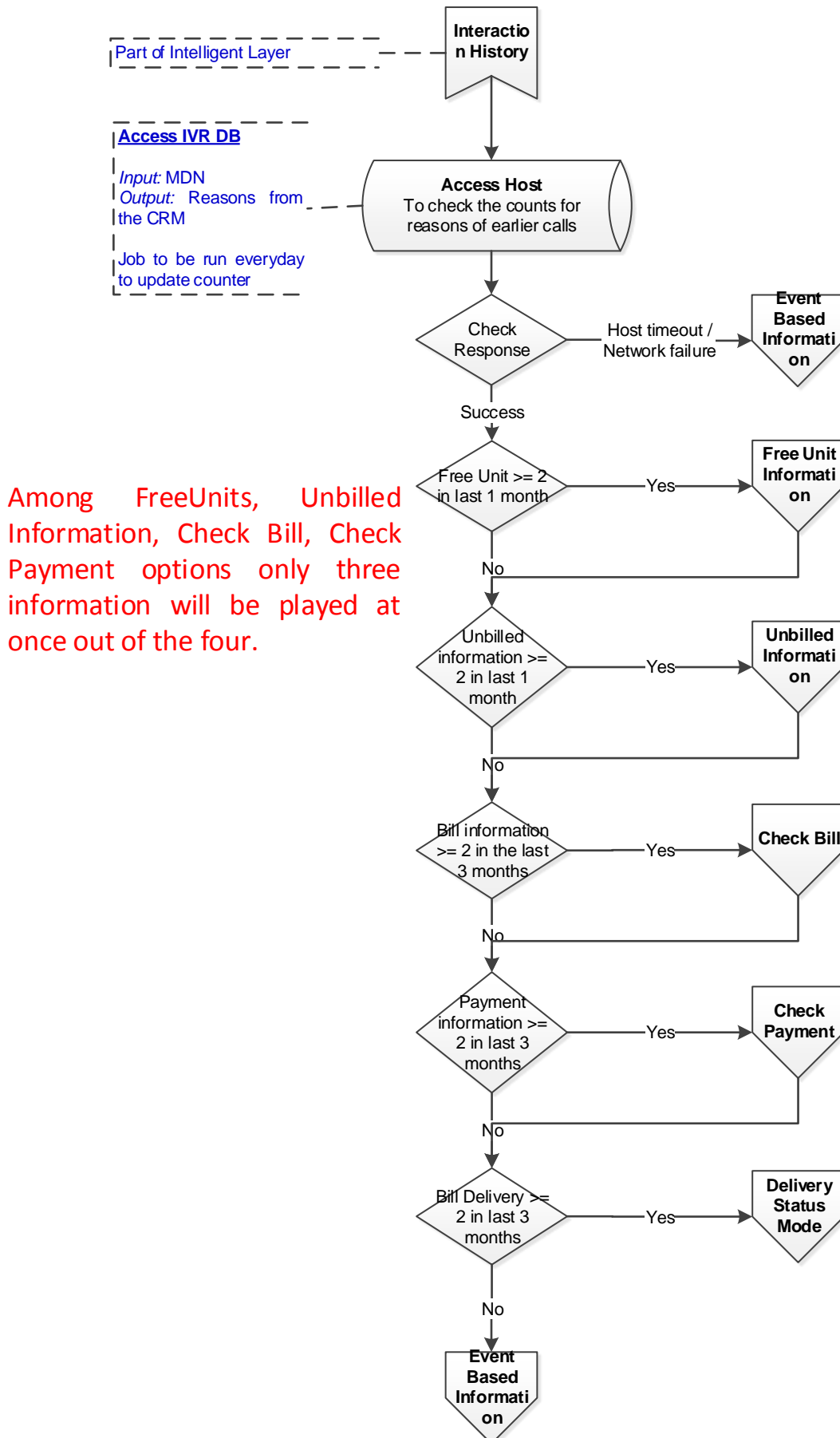
## Dunning Check Contd



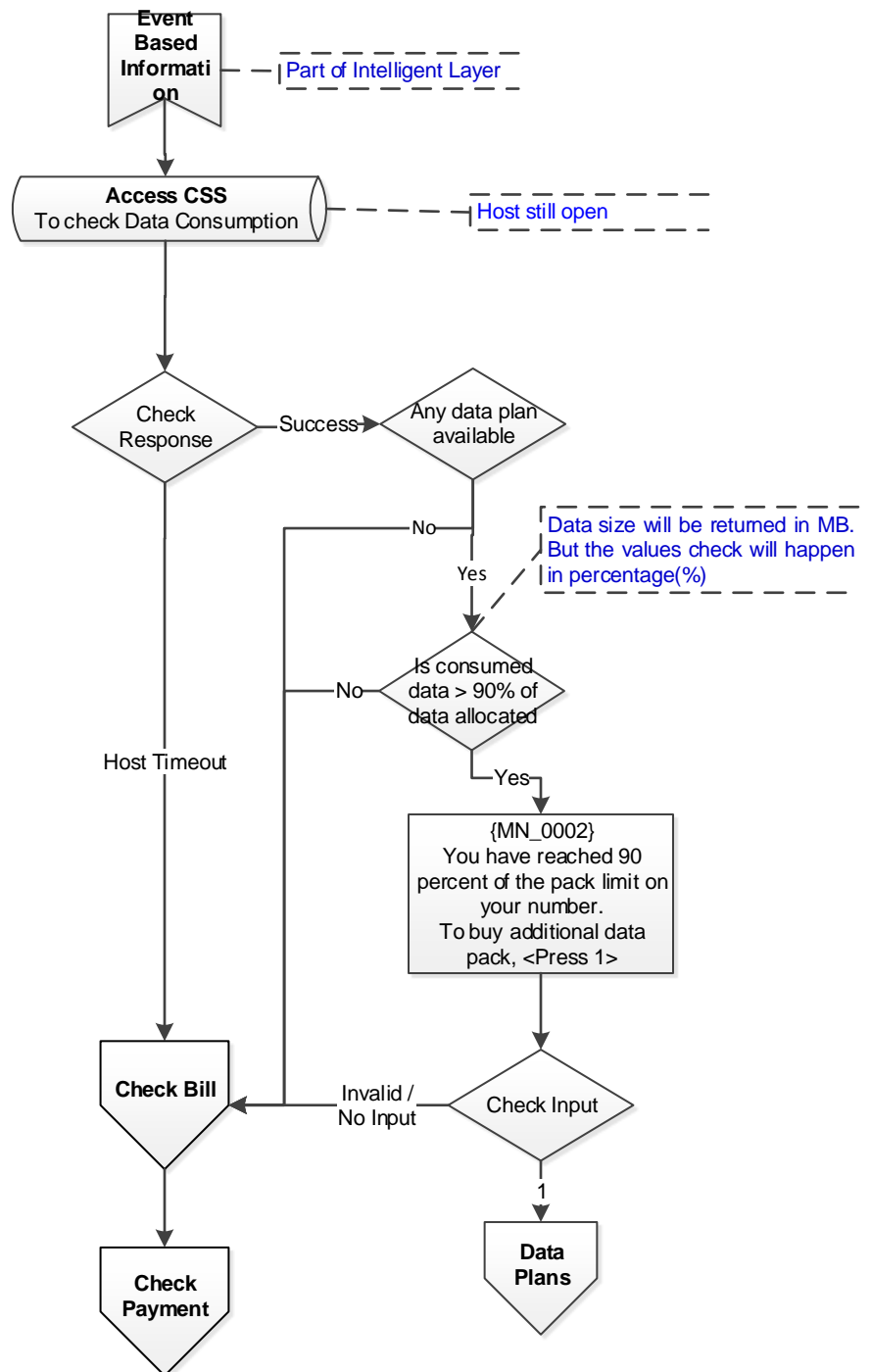
**Service Request History**



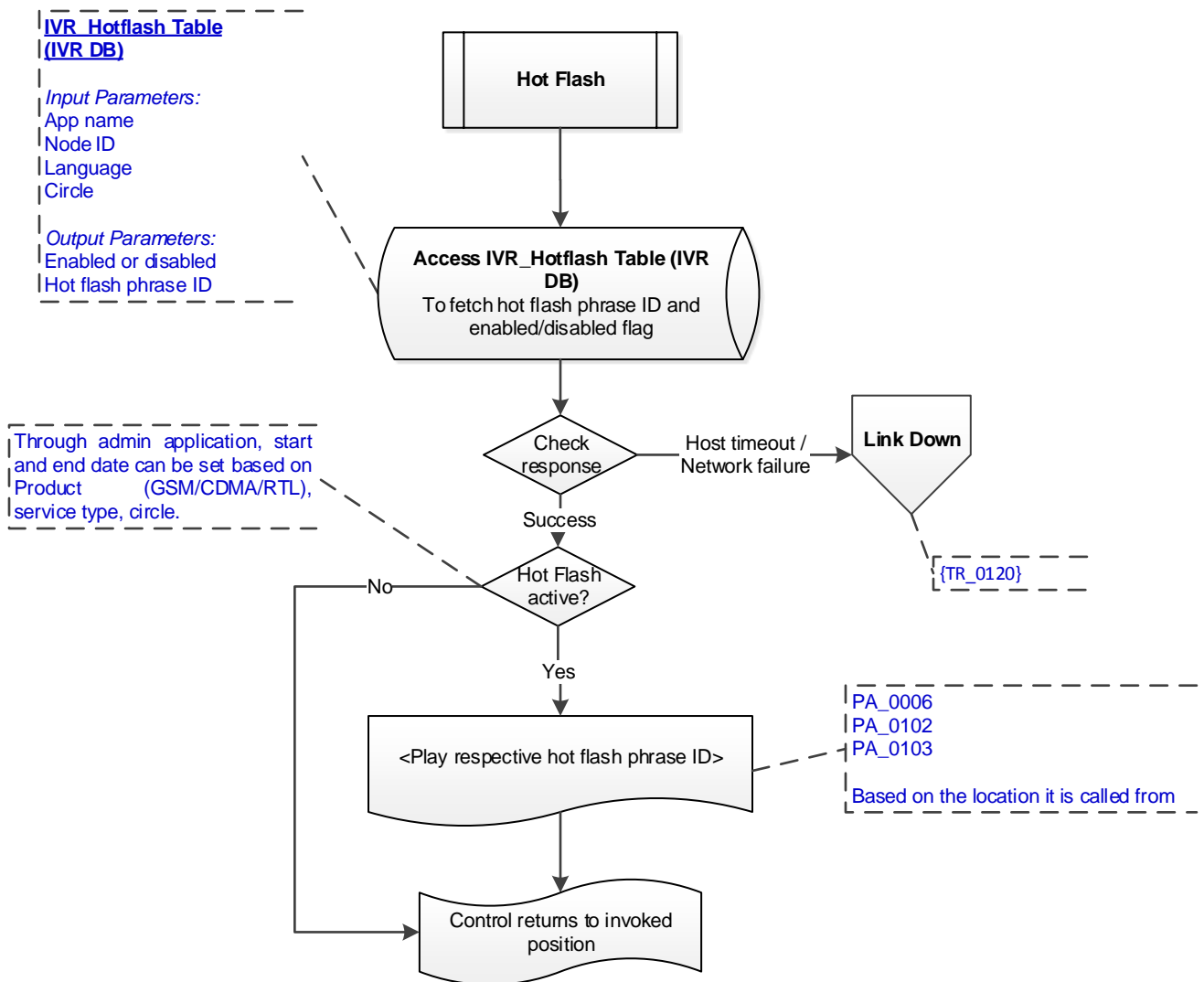
## Interaction History



### Event Based Information



### Hot Flash



## Language Selection

Access IVR\_CSP Table (IVR DB)

**Input Parameters:**  
MDN (Mobile Directory Number)

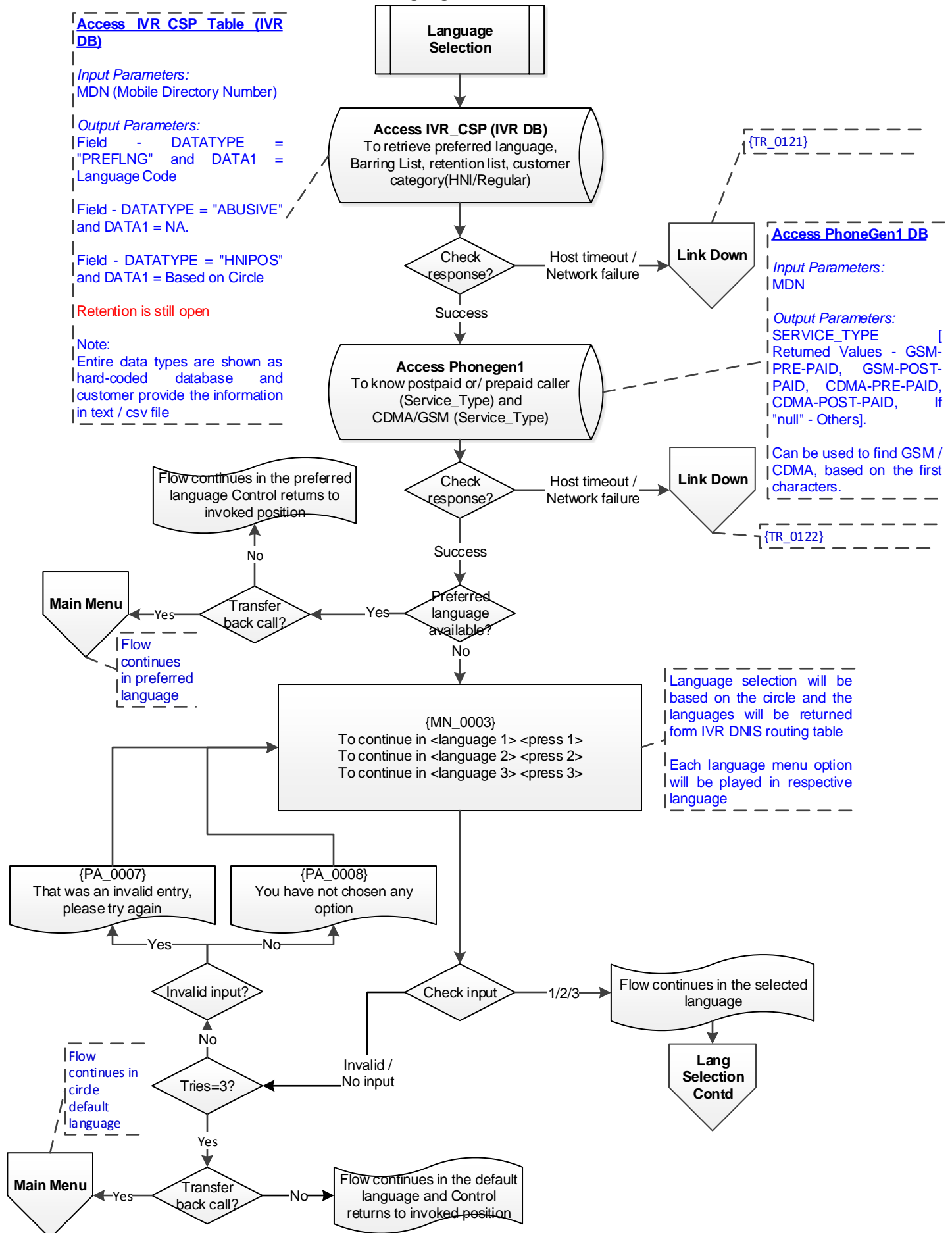
**Output Parameters:**  
Field - DATATYPE =  
"PREFLNG" and DATA1 =  
Language Code

Field - DATATYPE = "ABUSIVE"  
and DATA1 = NA.

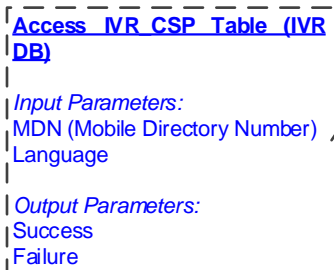
Field - DATATYPE = "HNIPOS"  
and DATA1 = Based on Circle

Retention is still open

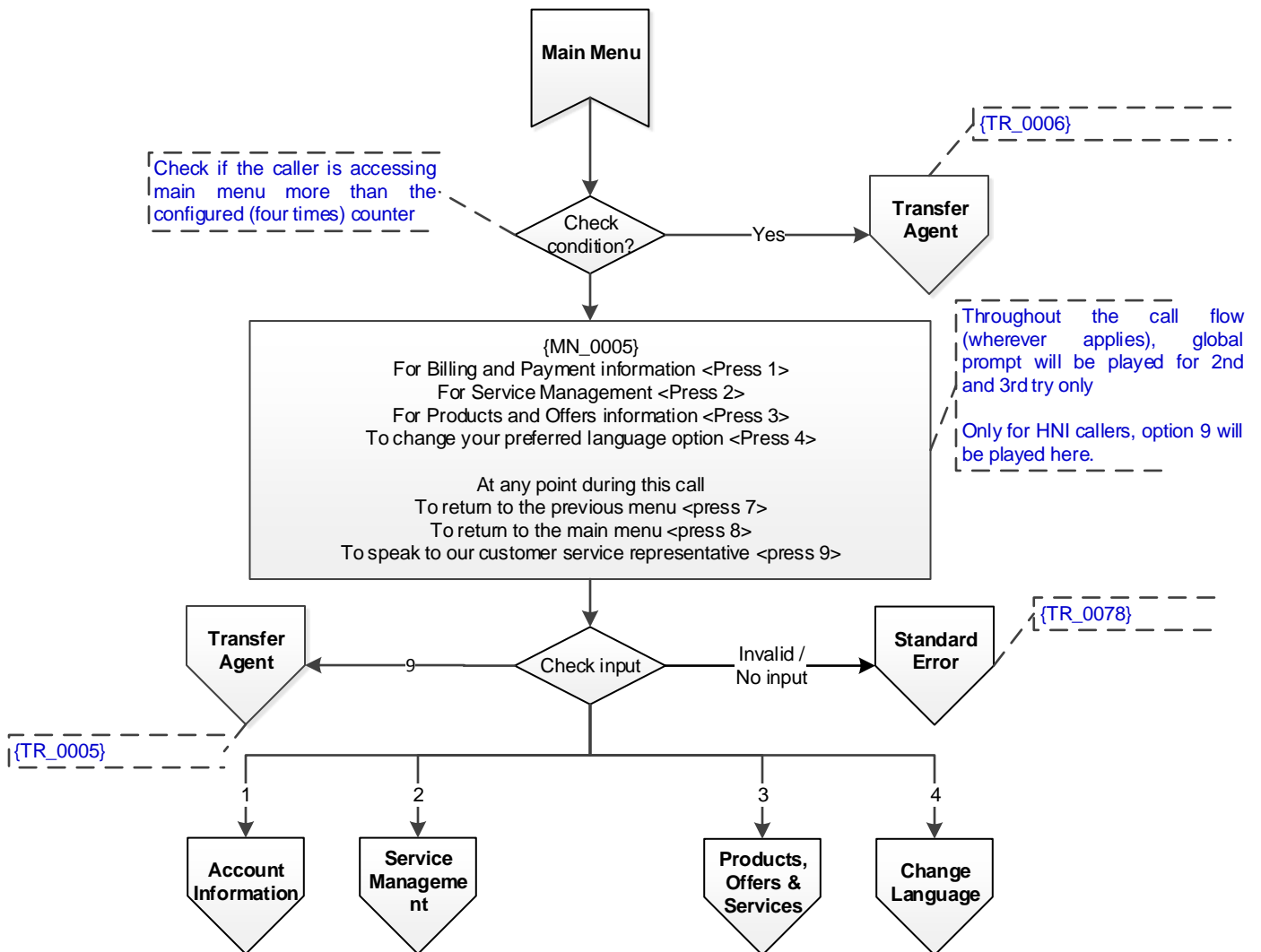
**Note:**  
Entire data types are shown as  
hard-coded database and  
customer provide the information  
in text / csv file



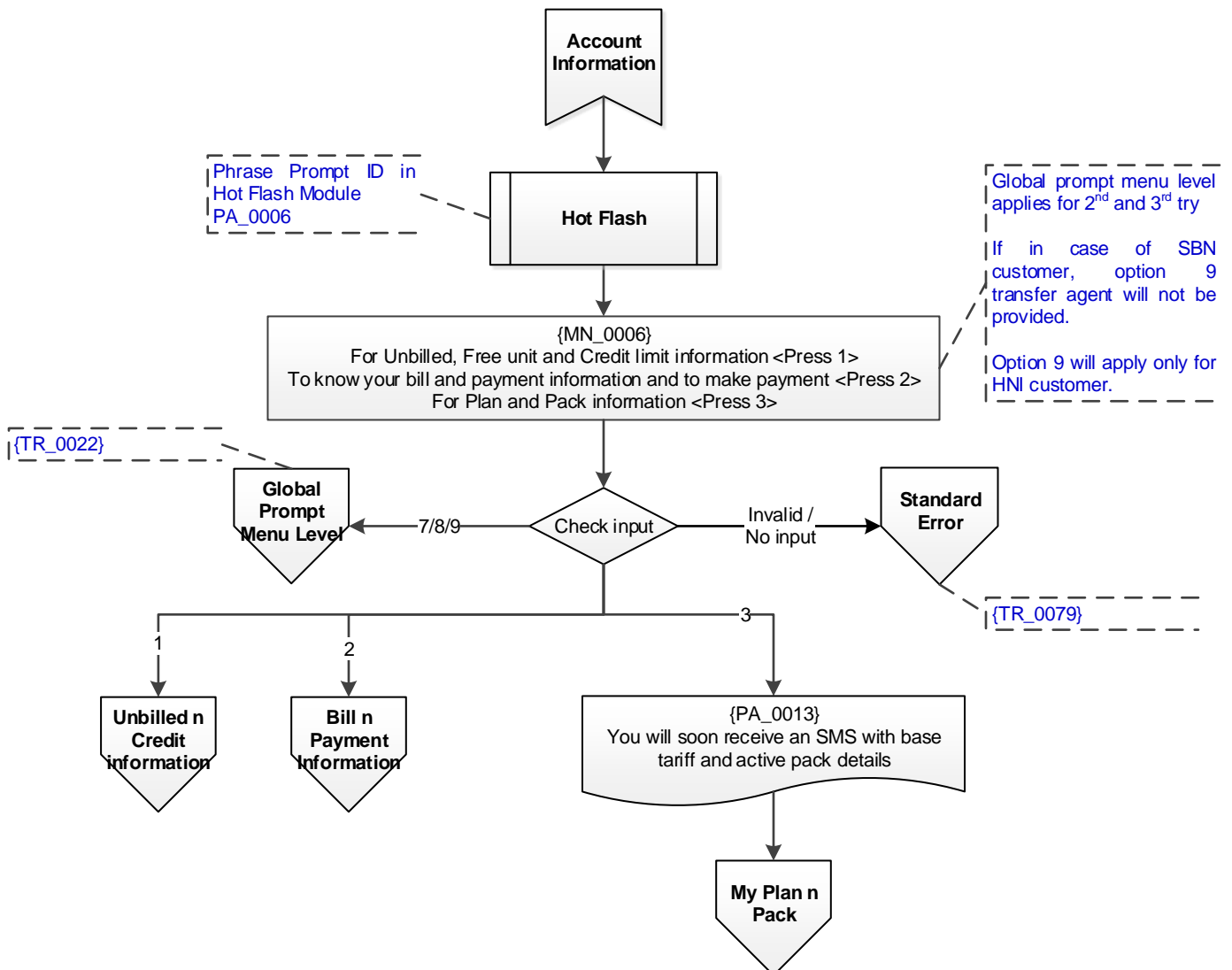




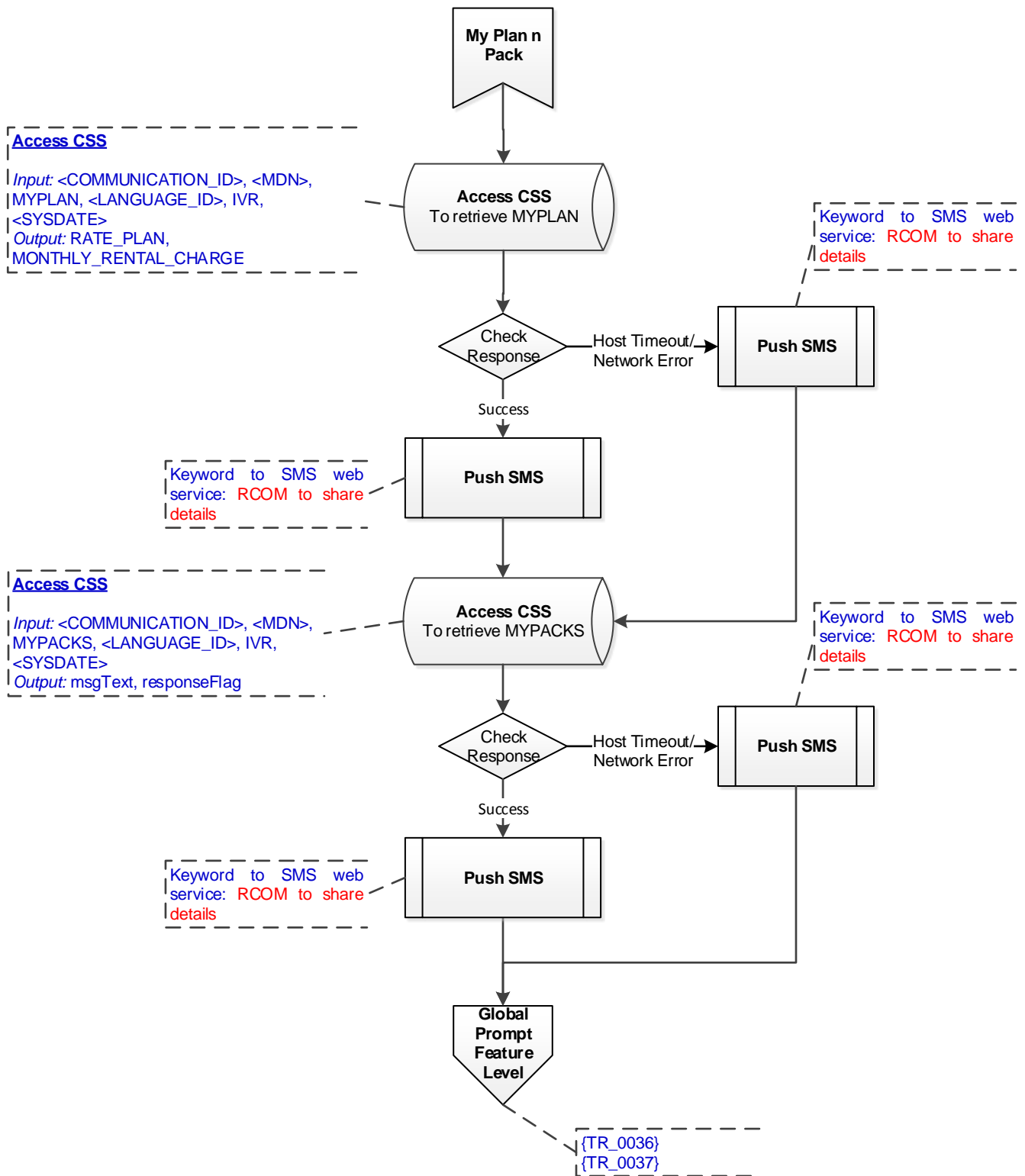
## Main Menu



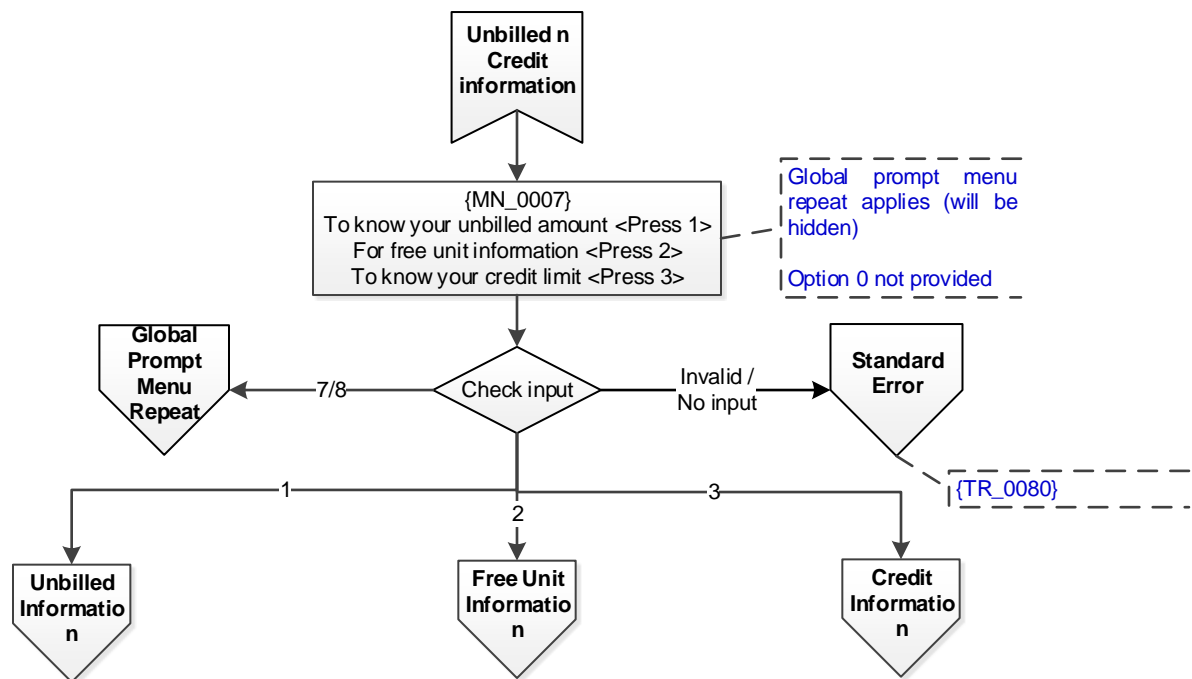
### Account Information



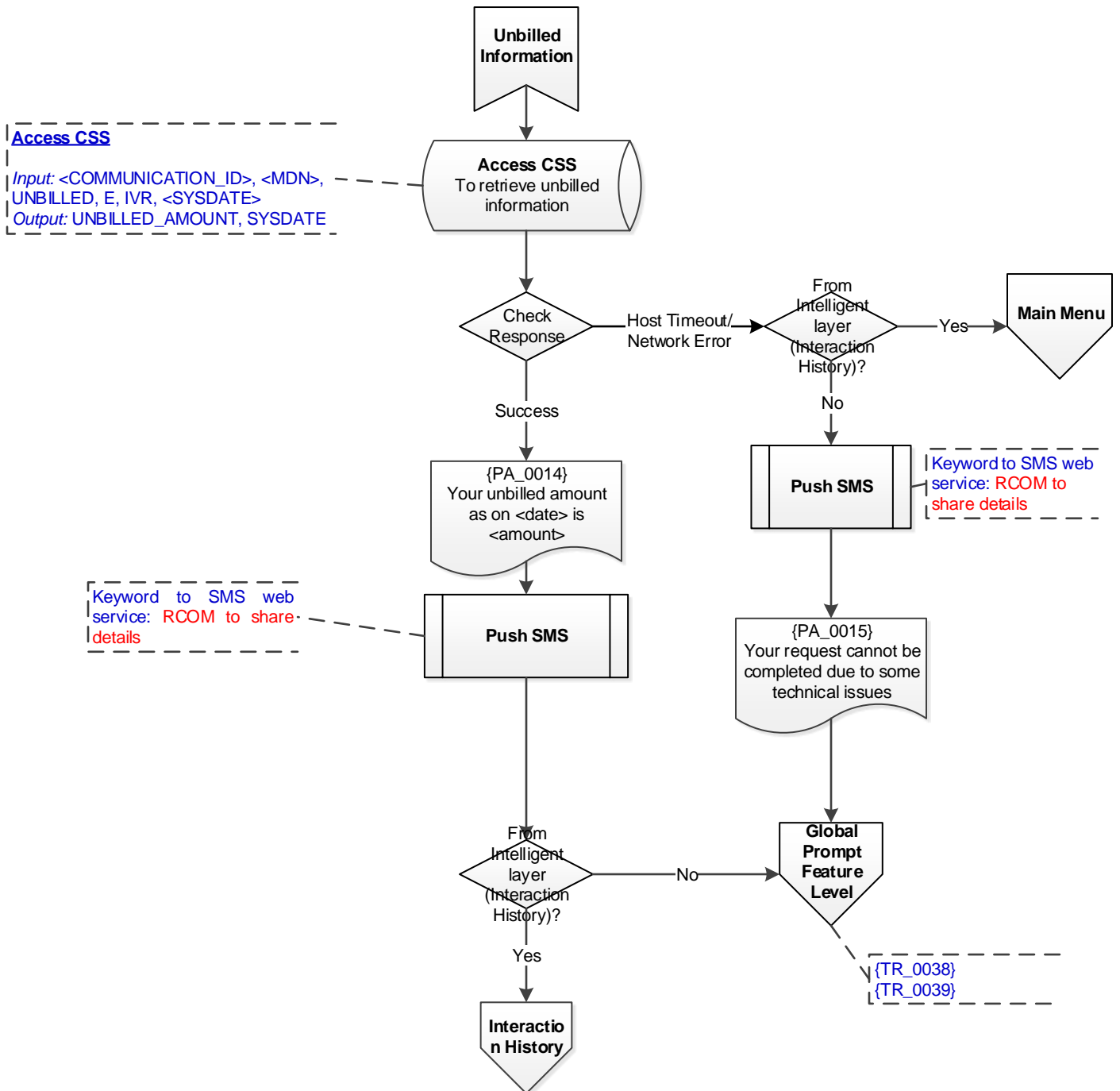
### My Plan n Pack



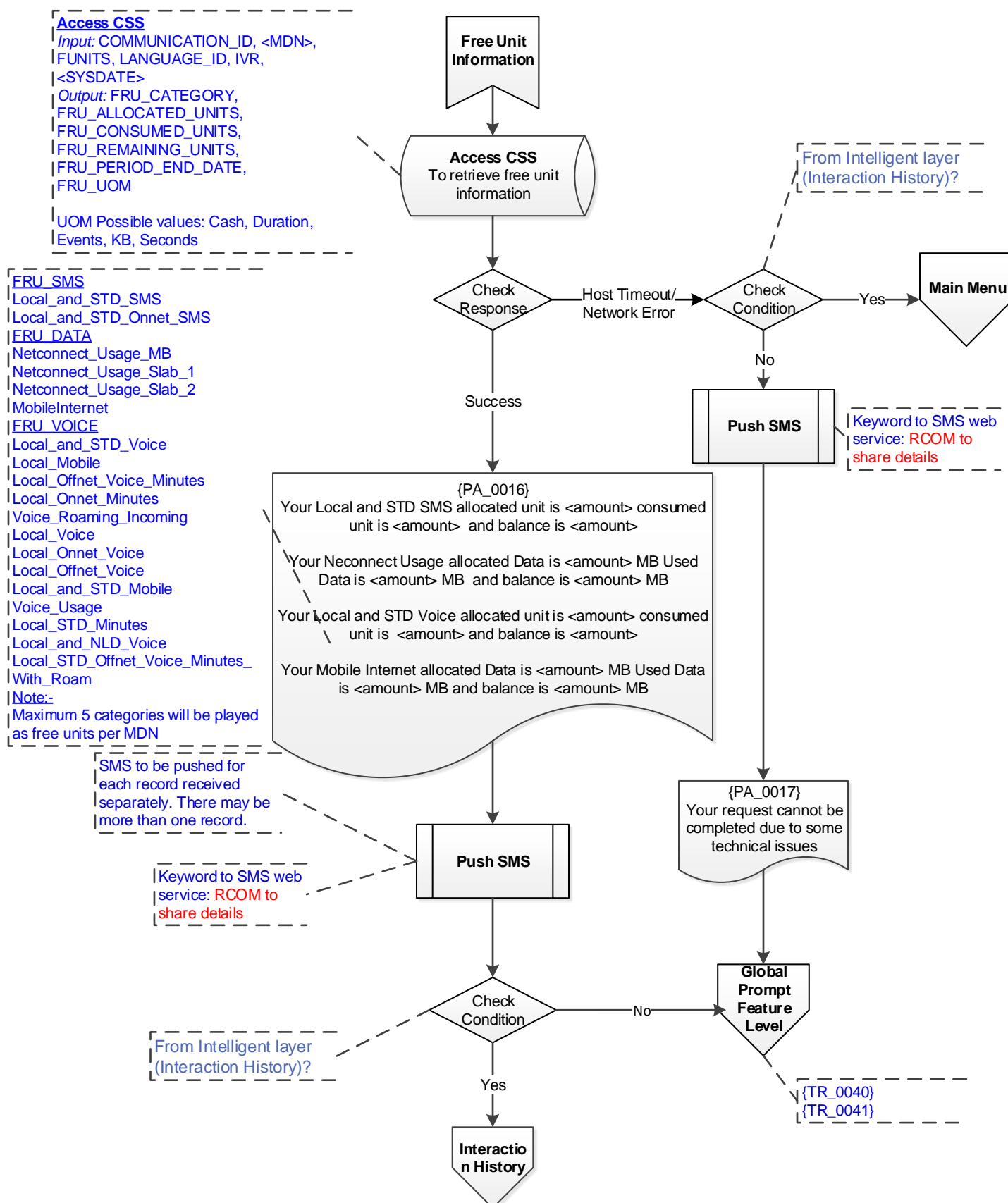
**Unbilled n Credit information**



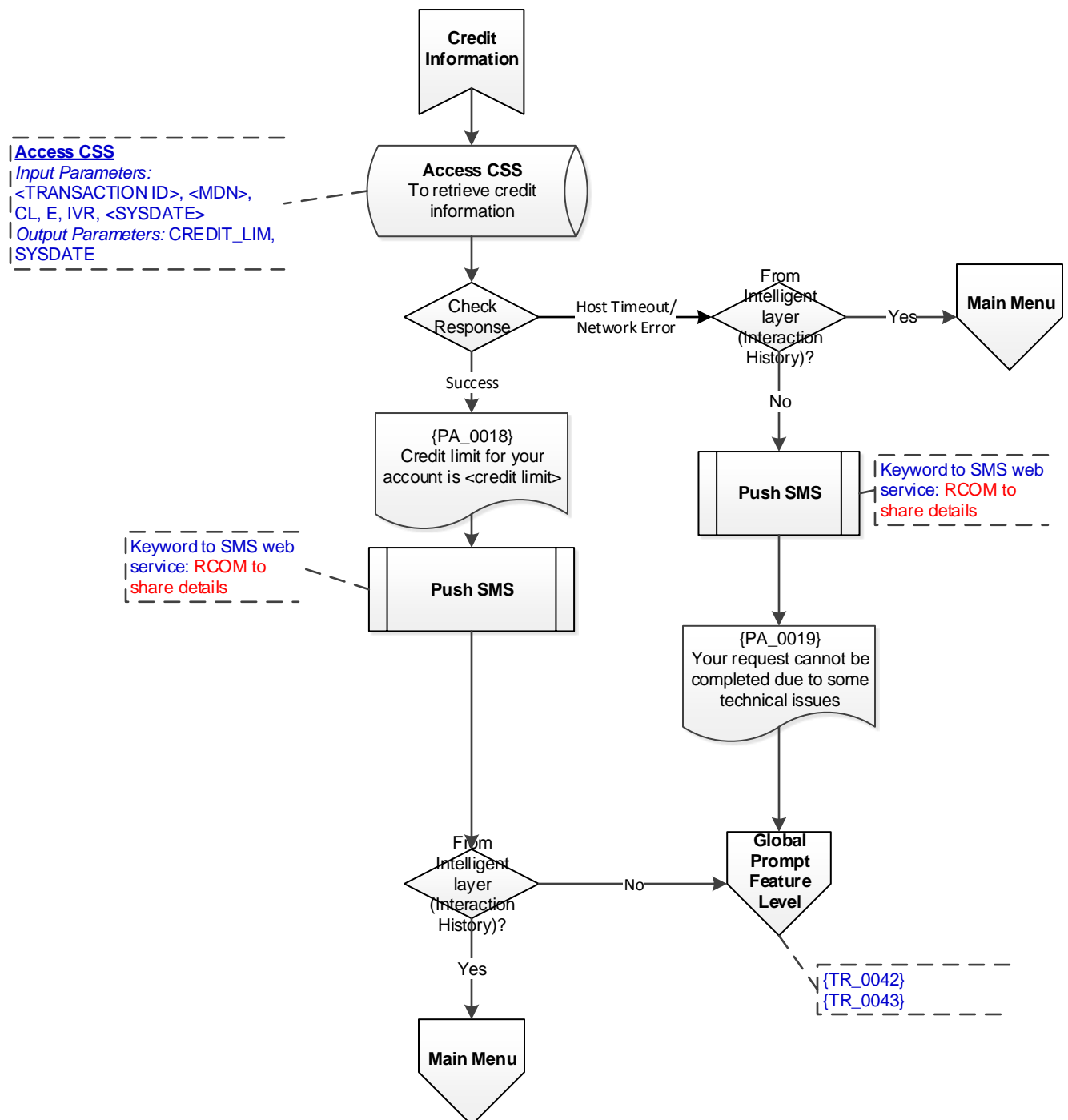
### Unbilled Information



## Free Unit Information

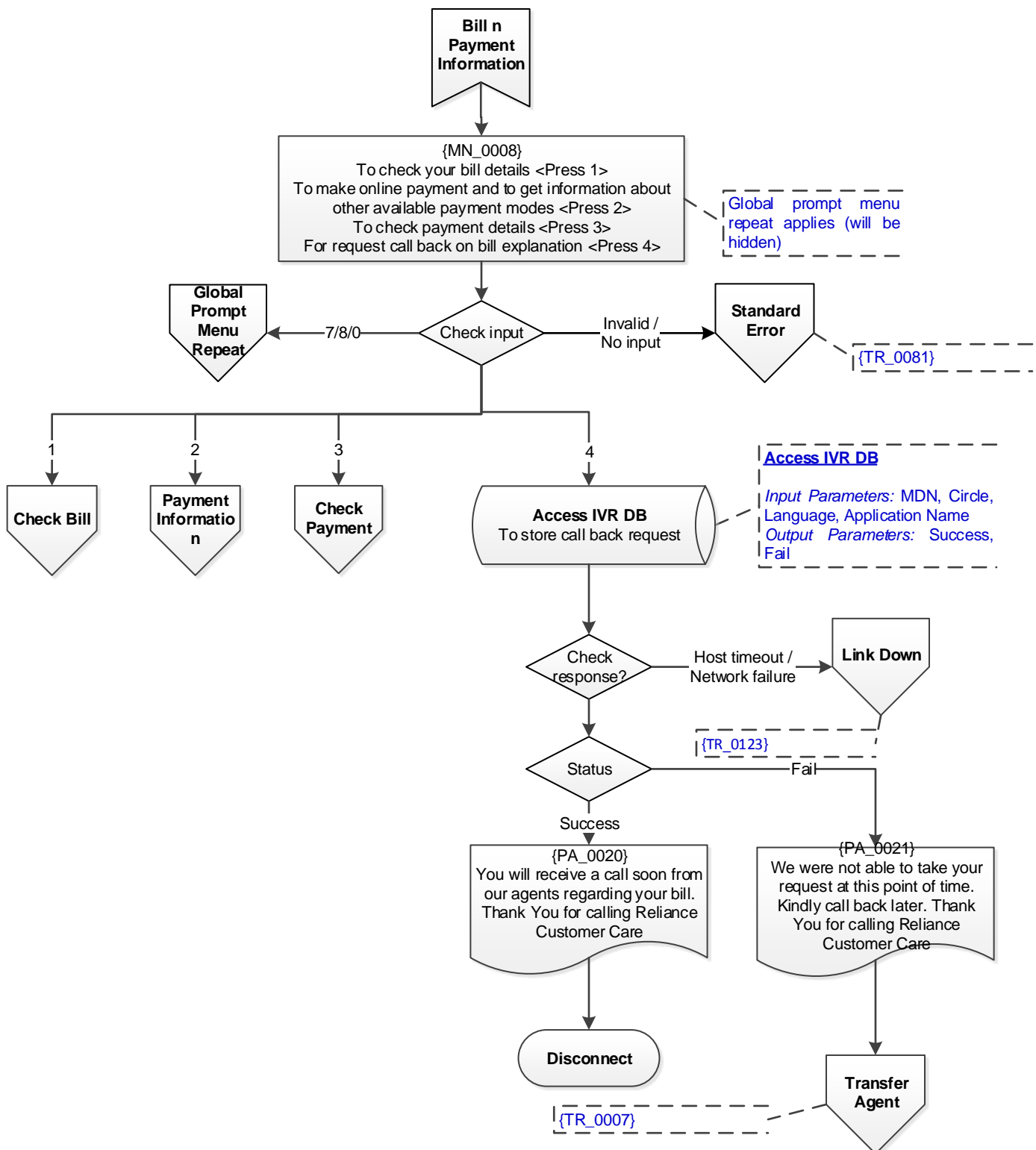


### Credit Information





## Bill n Payment Information

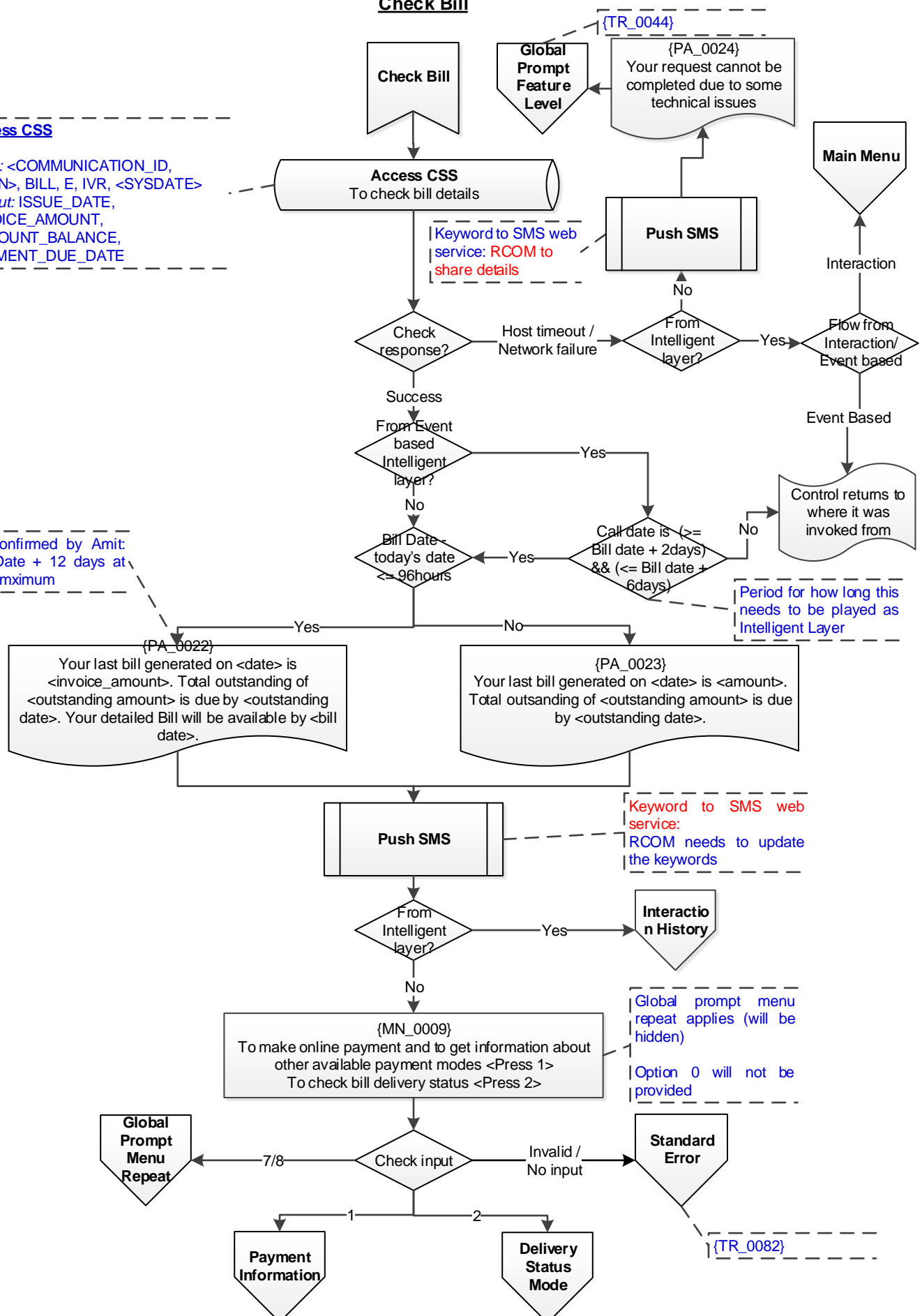


## Check Bill

### Access CSS

Input: <COMMUNICATION\_ID,  
<MDN>, BILL, E, IVR, <SYSDATE>  
Output: ISSUE\_DATE,  
INVOICE\_AMOUNT,  
ACCOUNT\_BALANCE,  
PAYMENT\_DUE\_DATE

As confirmed by Amit:  
Bill Date + 12 days at  
the amximum

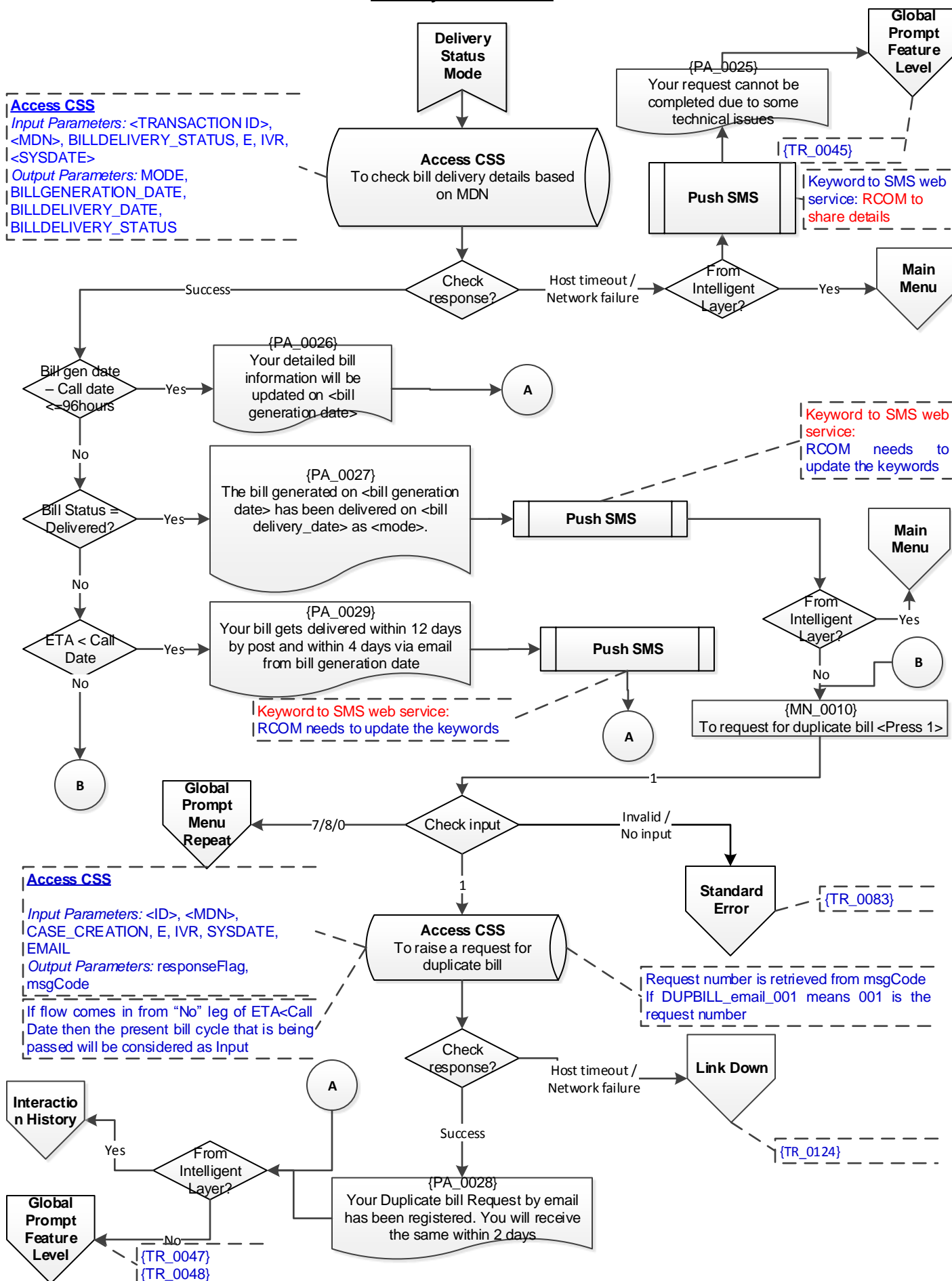


## Delivery Status Mode

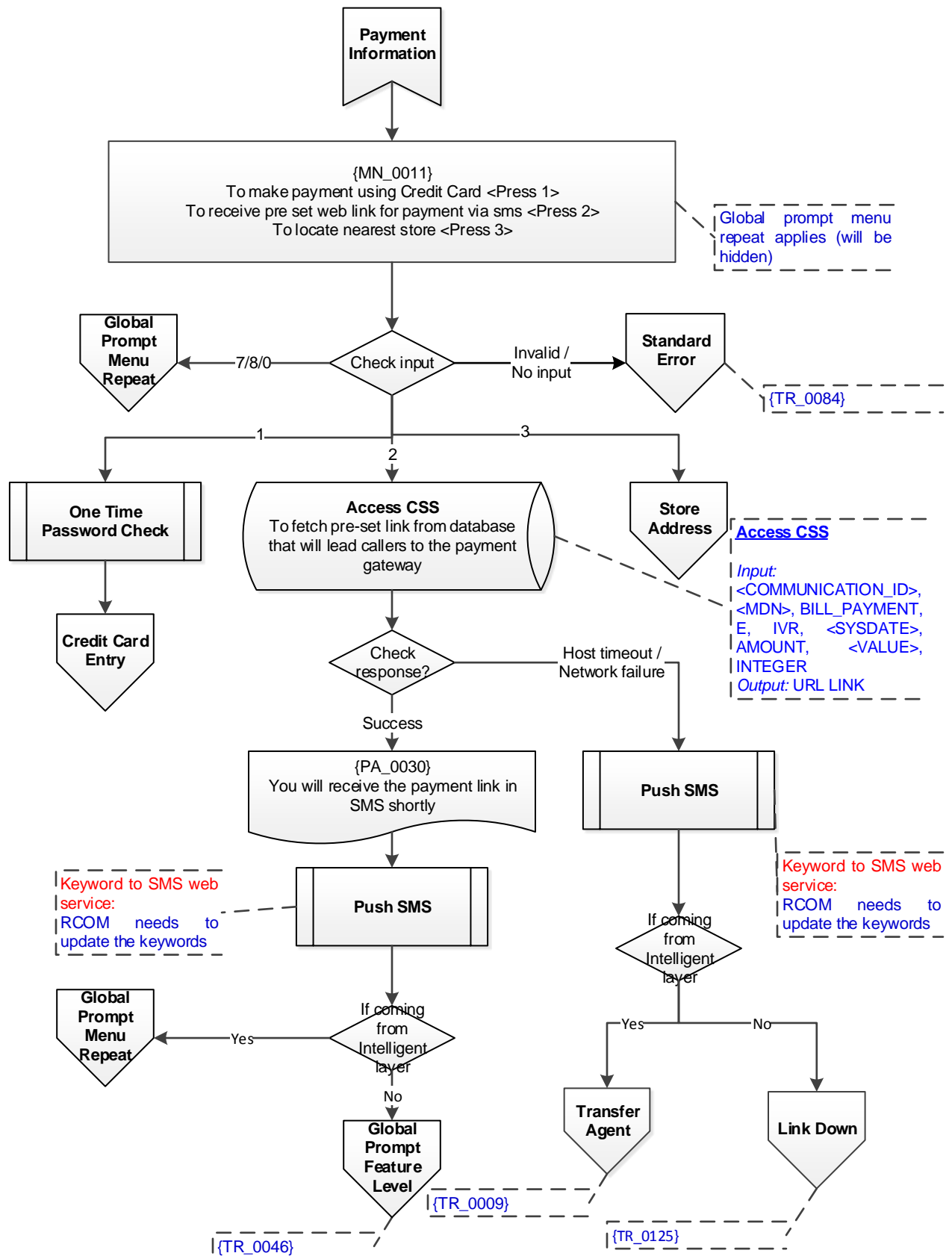
### Access CSS

Input Parameters: <TRANSACTION ID>, <MDN>, BILLDELIVERY\_STATUS, E, IVR, <SYSDATE>

Output Parameters: MODE, BILLGENERATION\_DATE, BILLDELIVERY\_DATE, BILLDELIVERY\_STATUS



**Payment Information**



## Check Payment

### Access CSS

Input: <COMMUNICATION\_ID>, <MDN>, LAST3, E, <SYSDATE>

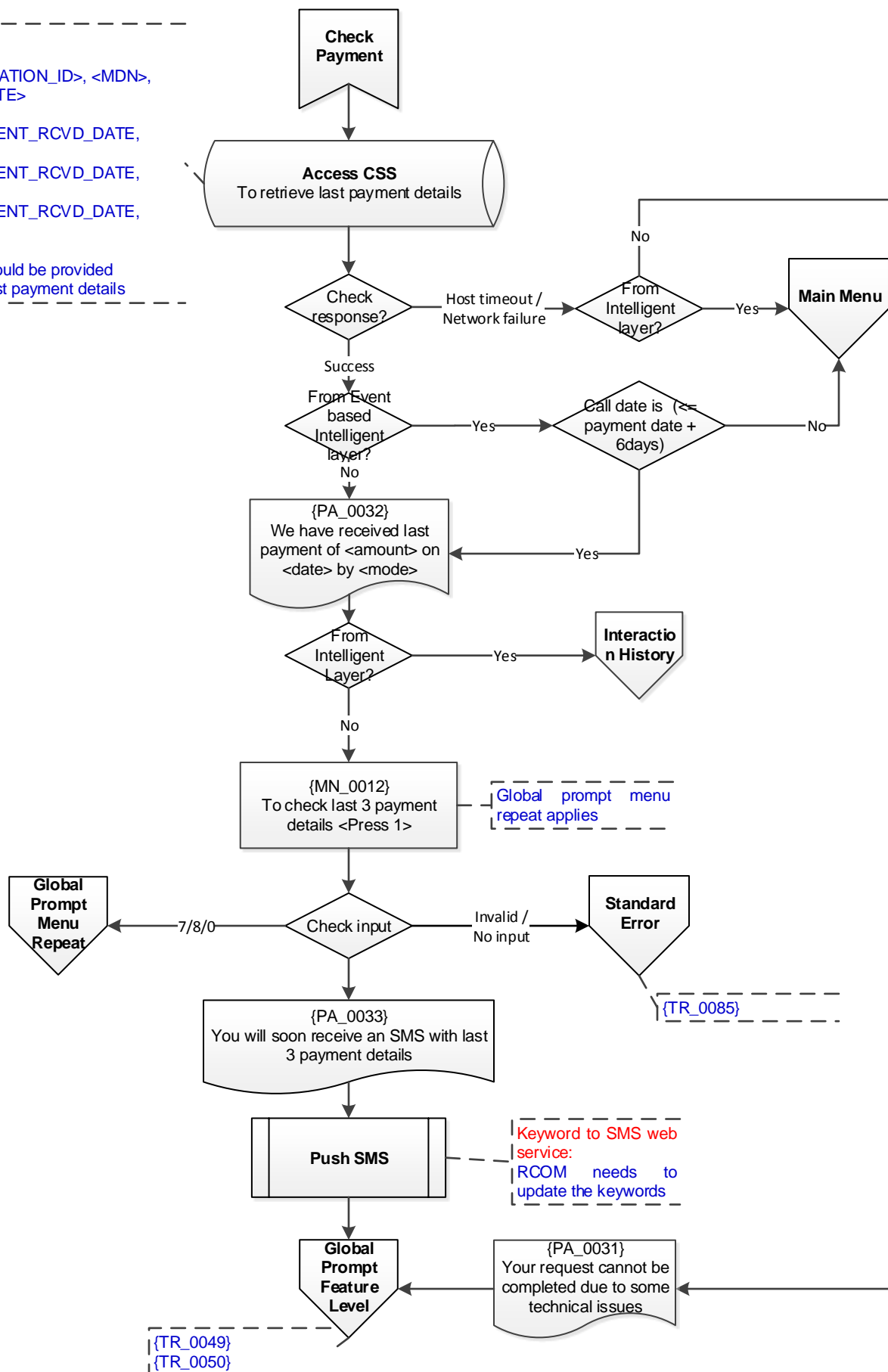
Output:

1. AMOUNT, PAYMENT\_RCVD\_DATE, PAYMENT\_TYPE

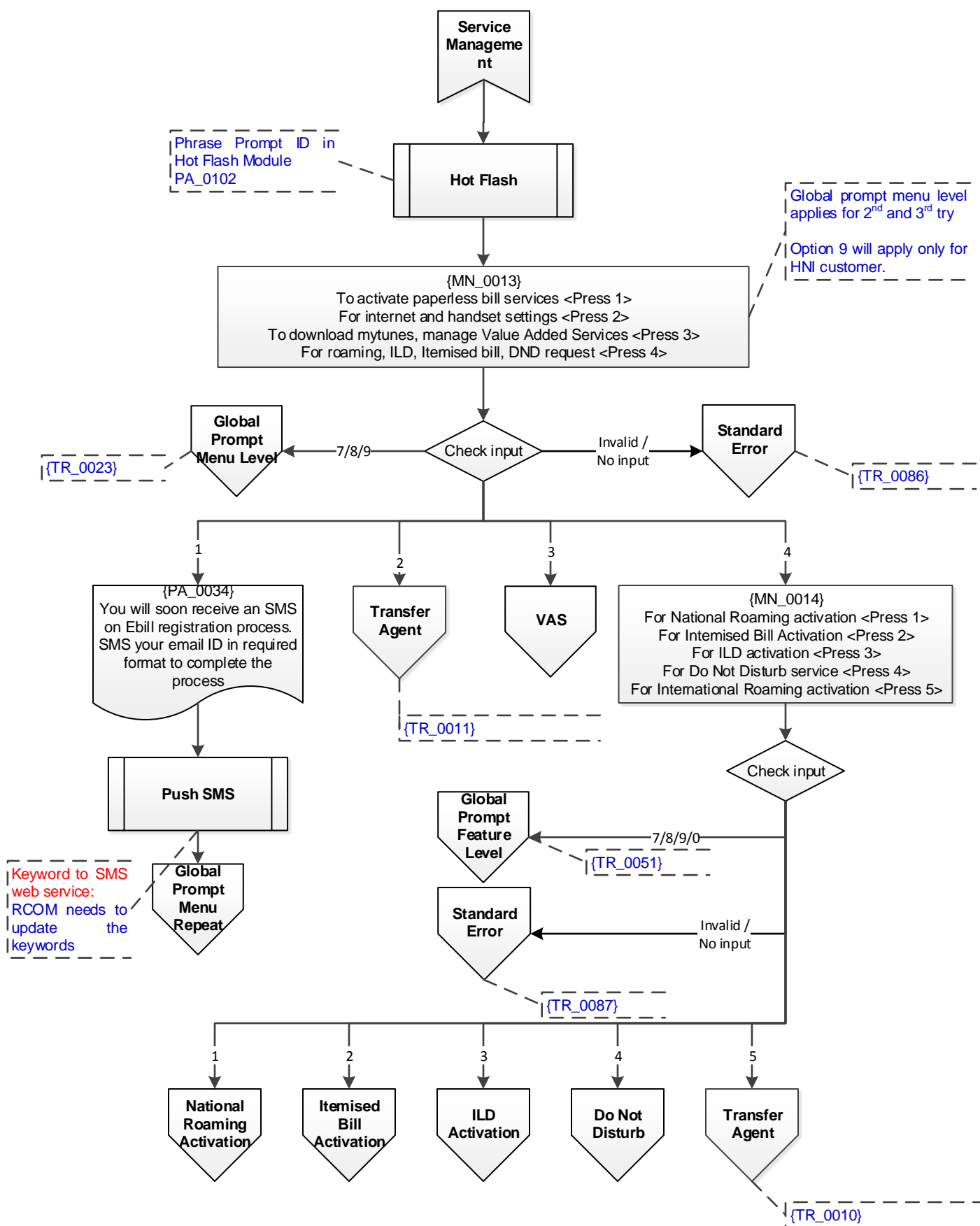
2. AMOUNT, PAYMENT\_RCVD\_DATE, PAYMENT\_TYPE

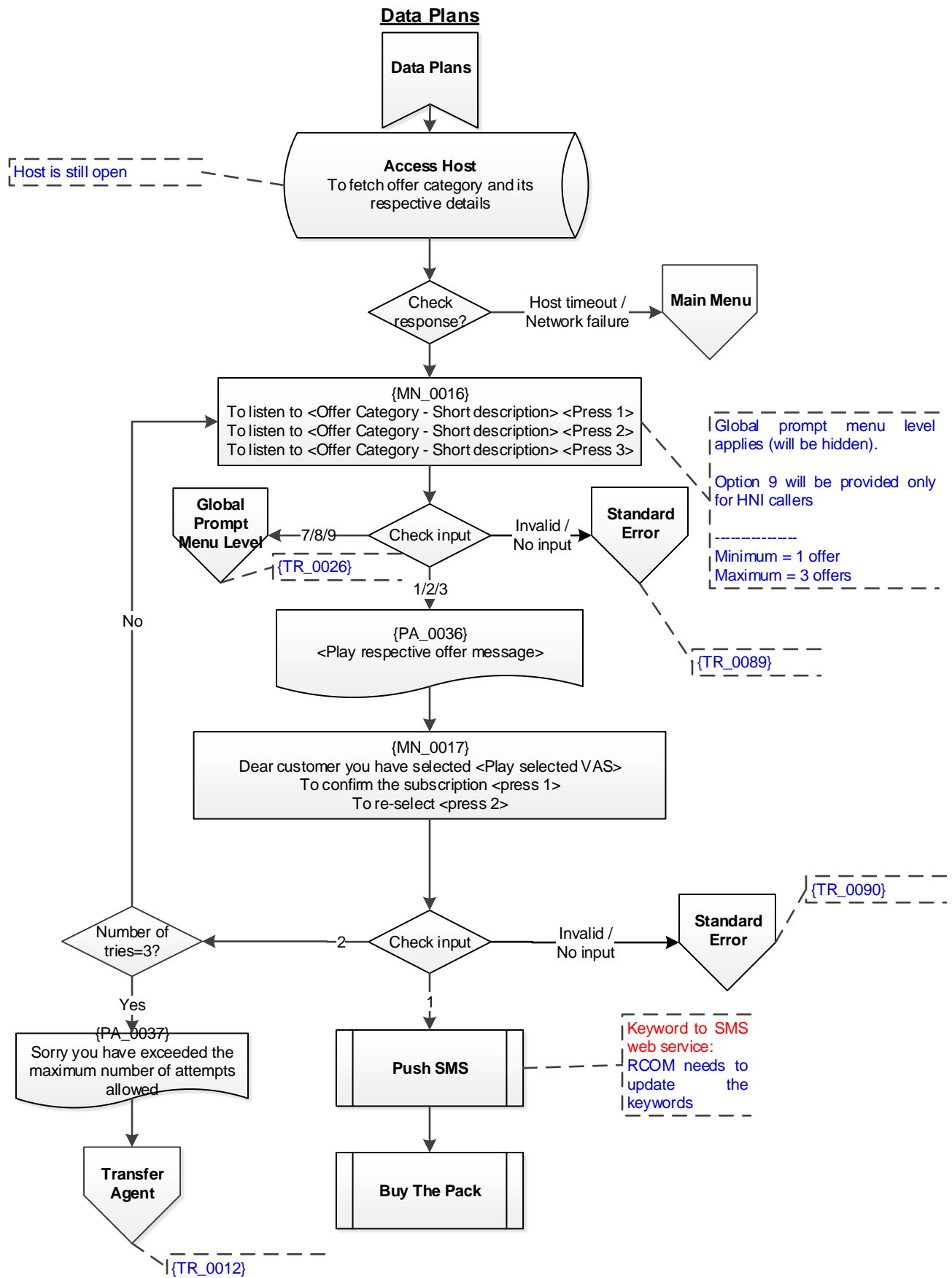
3. AMOUNT, PAYMENT\_RCVD\_DATE, PAYMENT\_TYPE

Total 3 payments would be provided  
TokenID1 will the last payment details

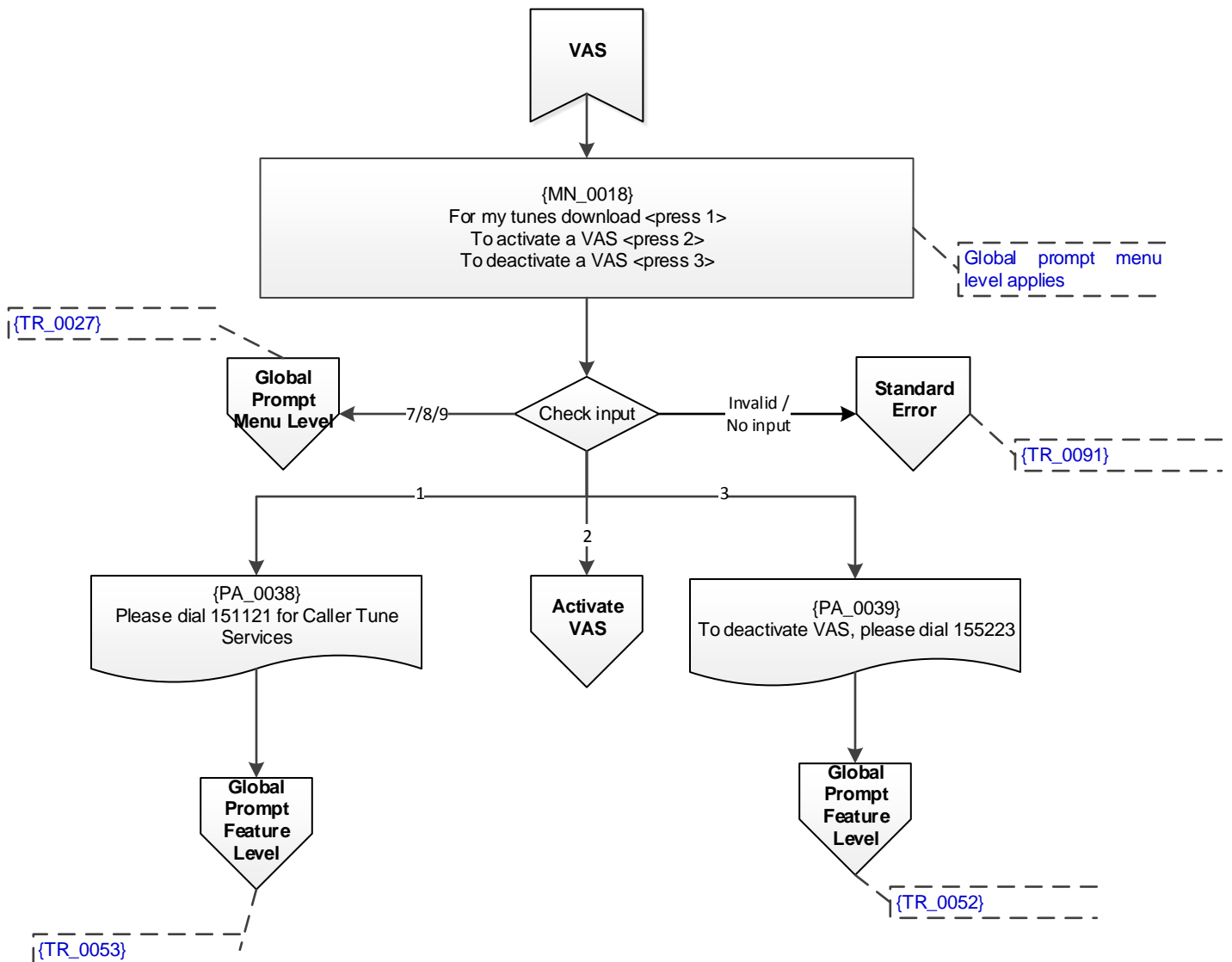


## Service Management





**VAS**





## Activate VAS

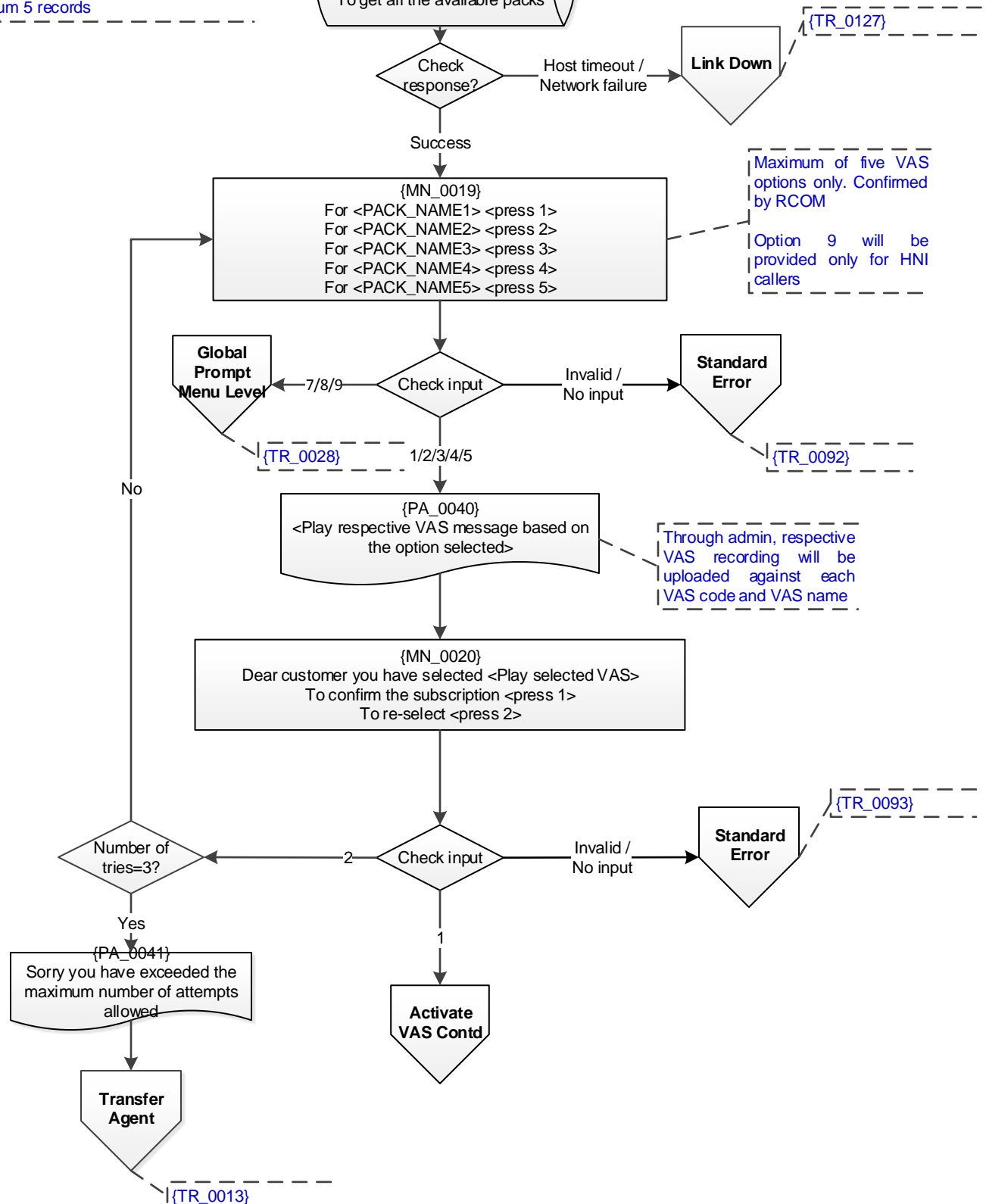
### Access CSS

Input: <COMMUNICATION\_ID>, <MDN>, GETPACK, E, <SYSDATE>

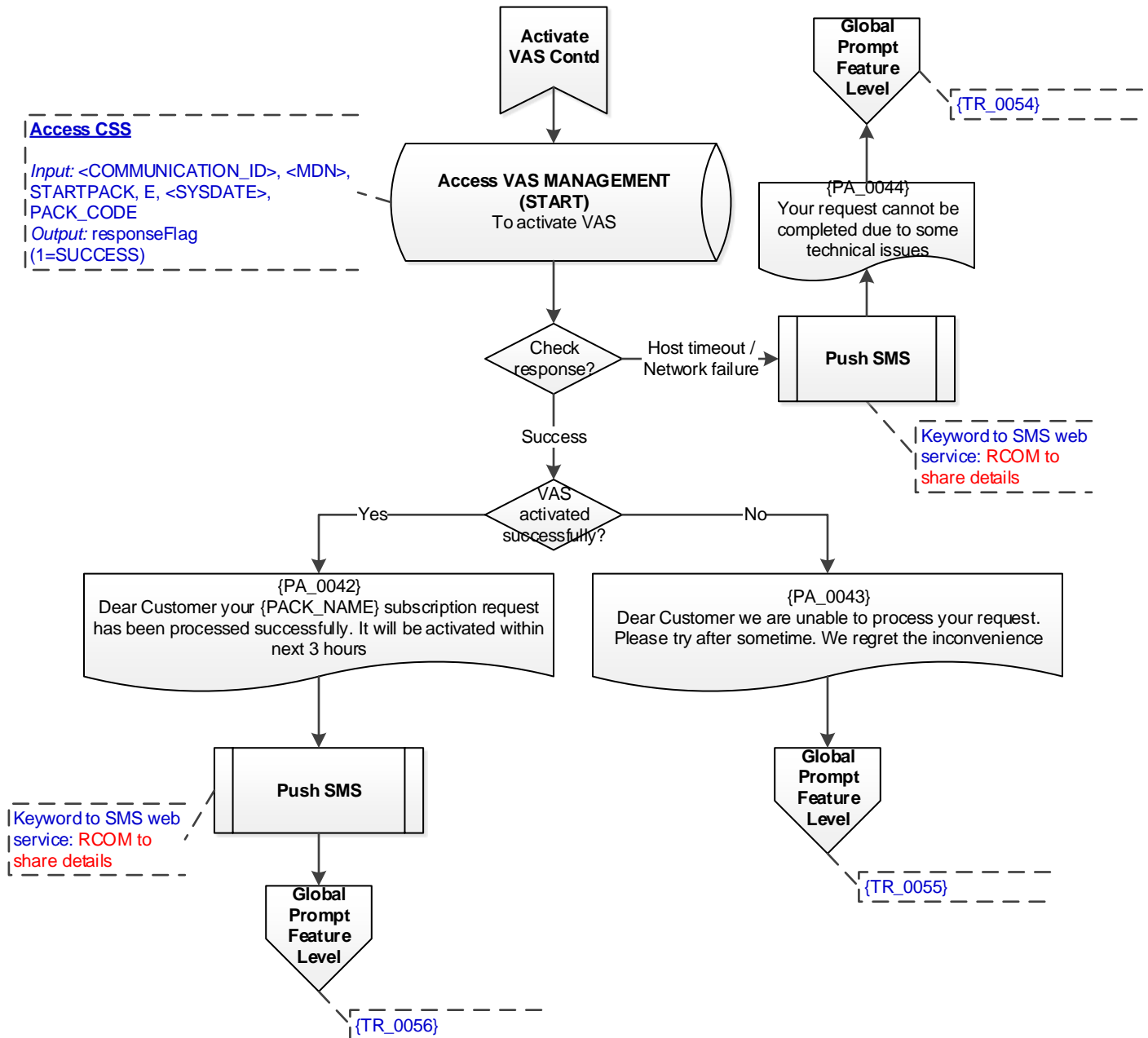
Output:

1. PACK\_NAME, PACK\_CODE, PACK\_VALIDITY, PACK\_AMOUNT

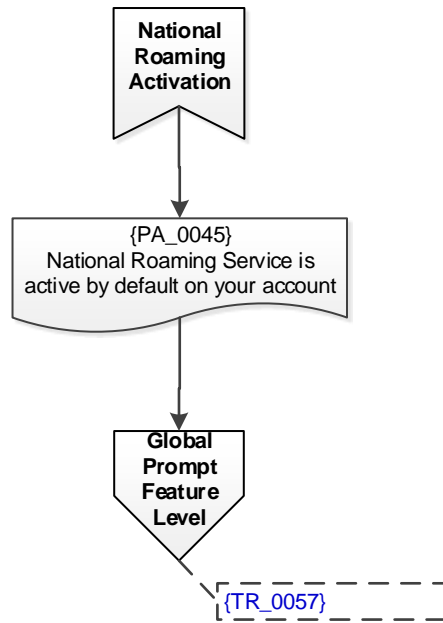
Maximum 5 records



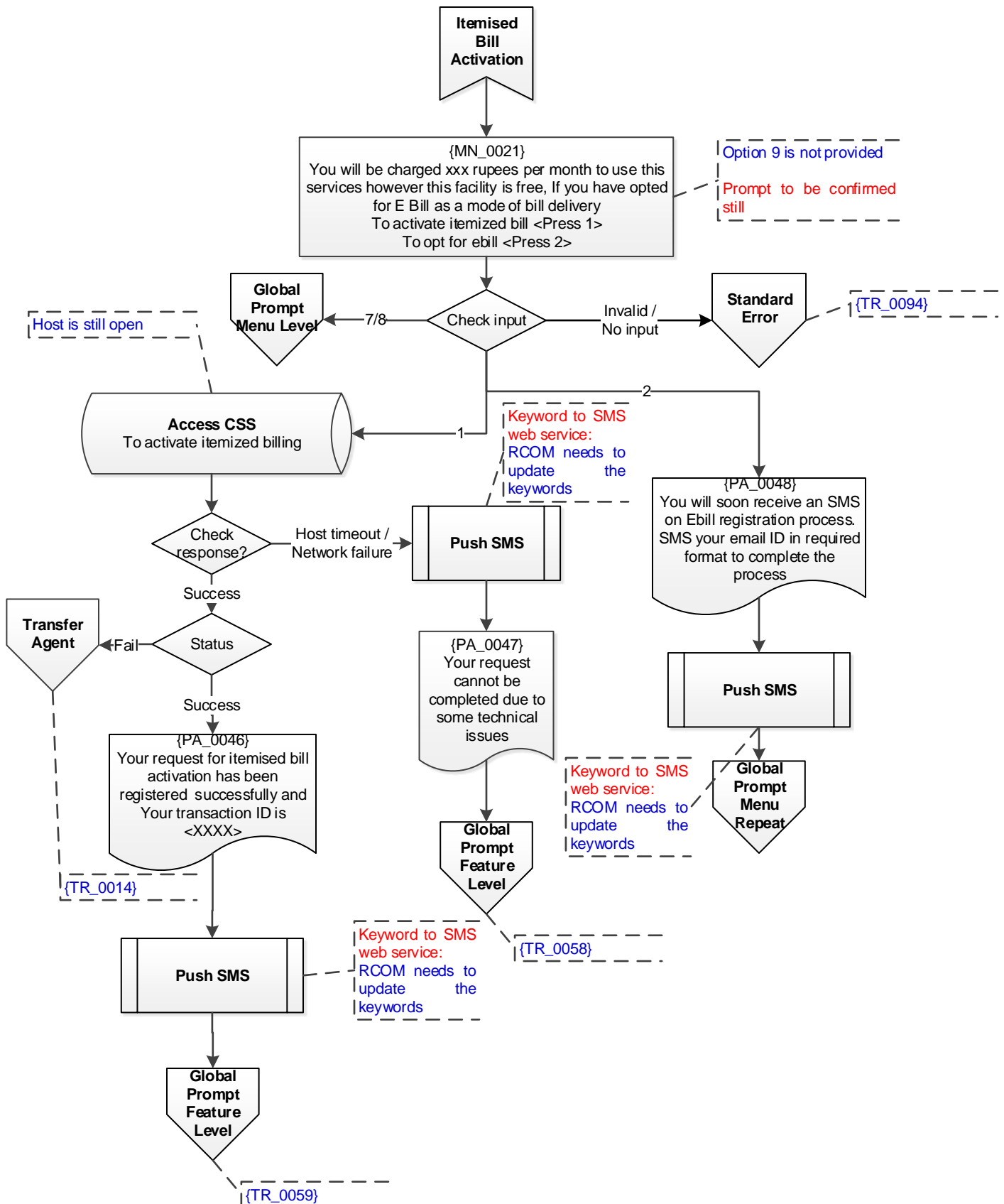
## Activate VAS Contd



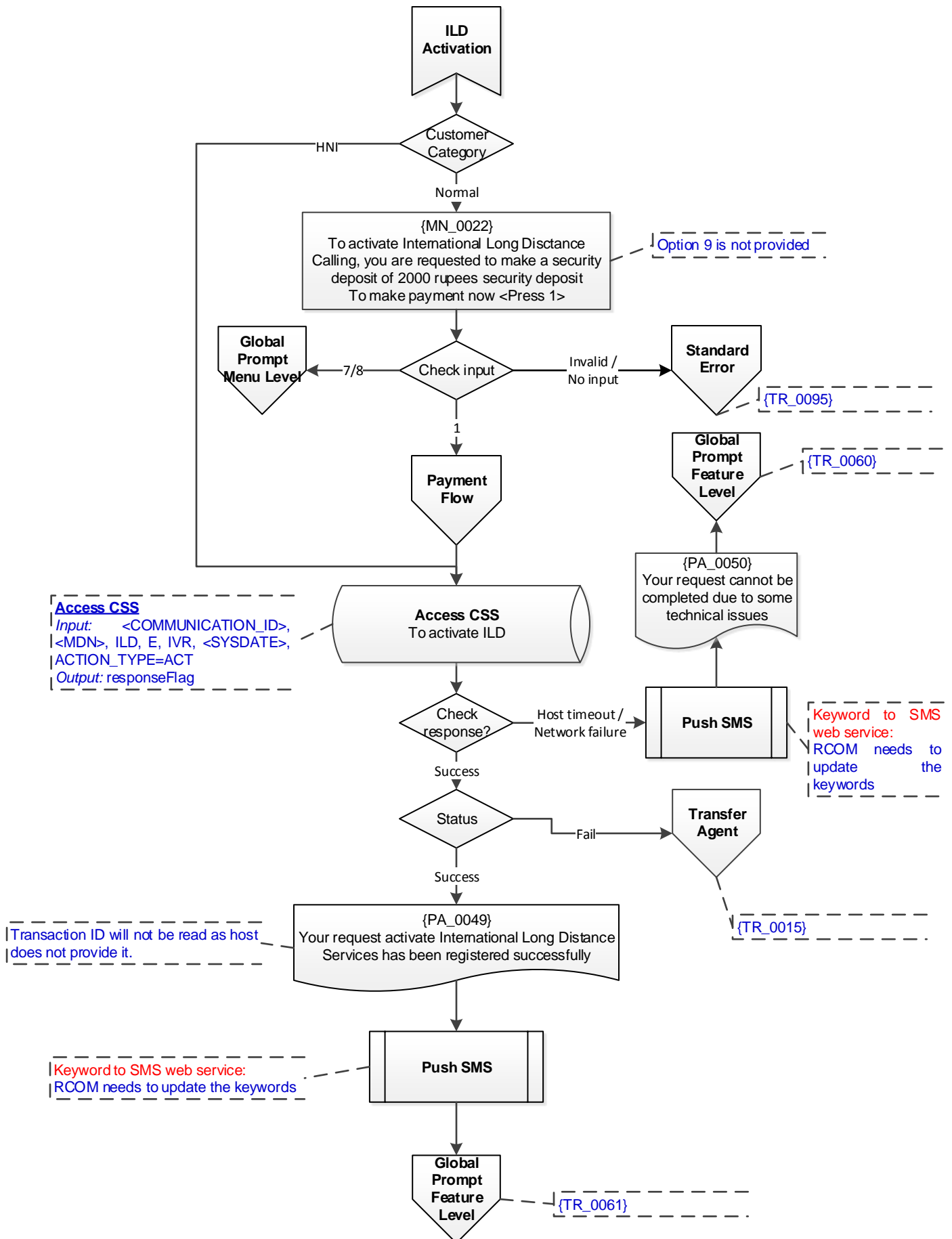
**National Roaming Activation**

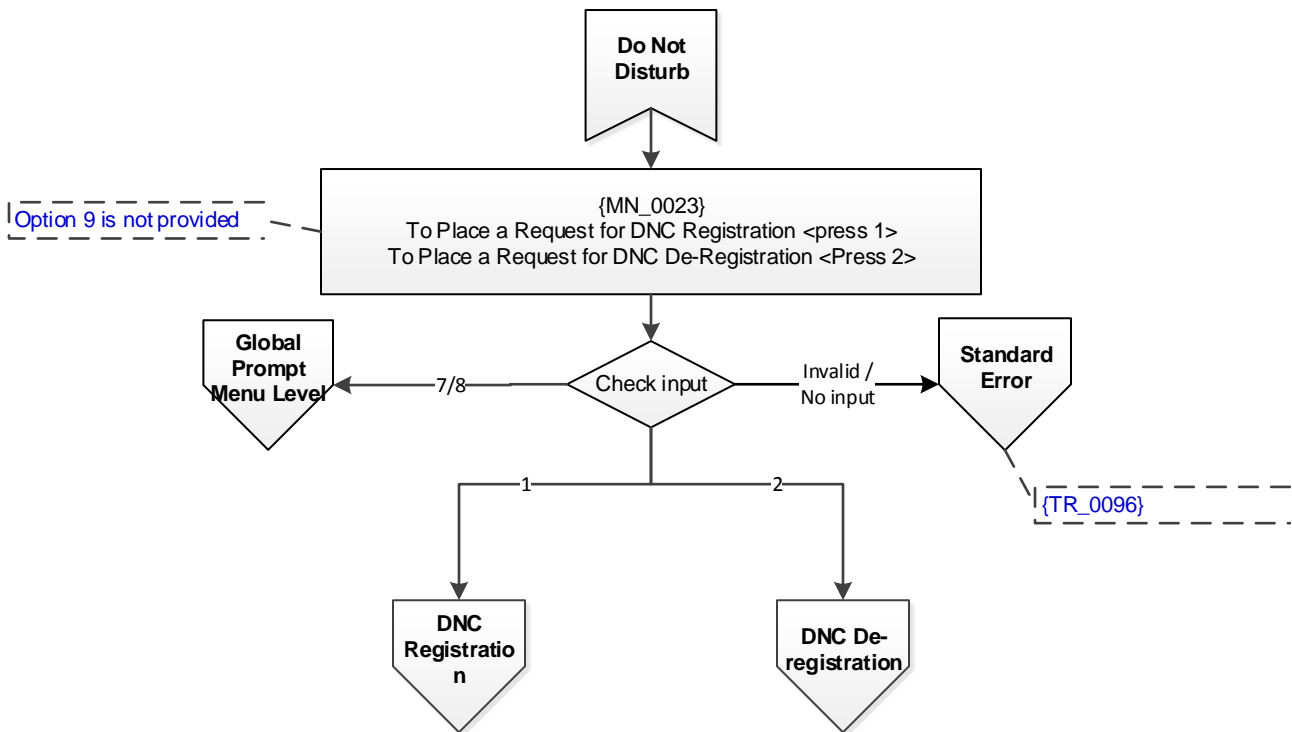


### Itemised Bill Activation

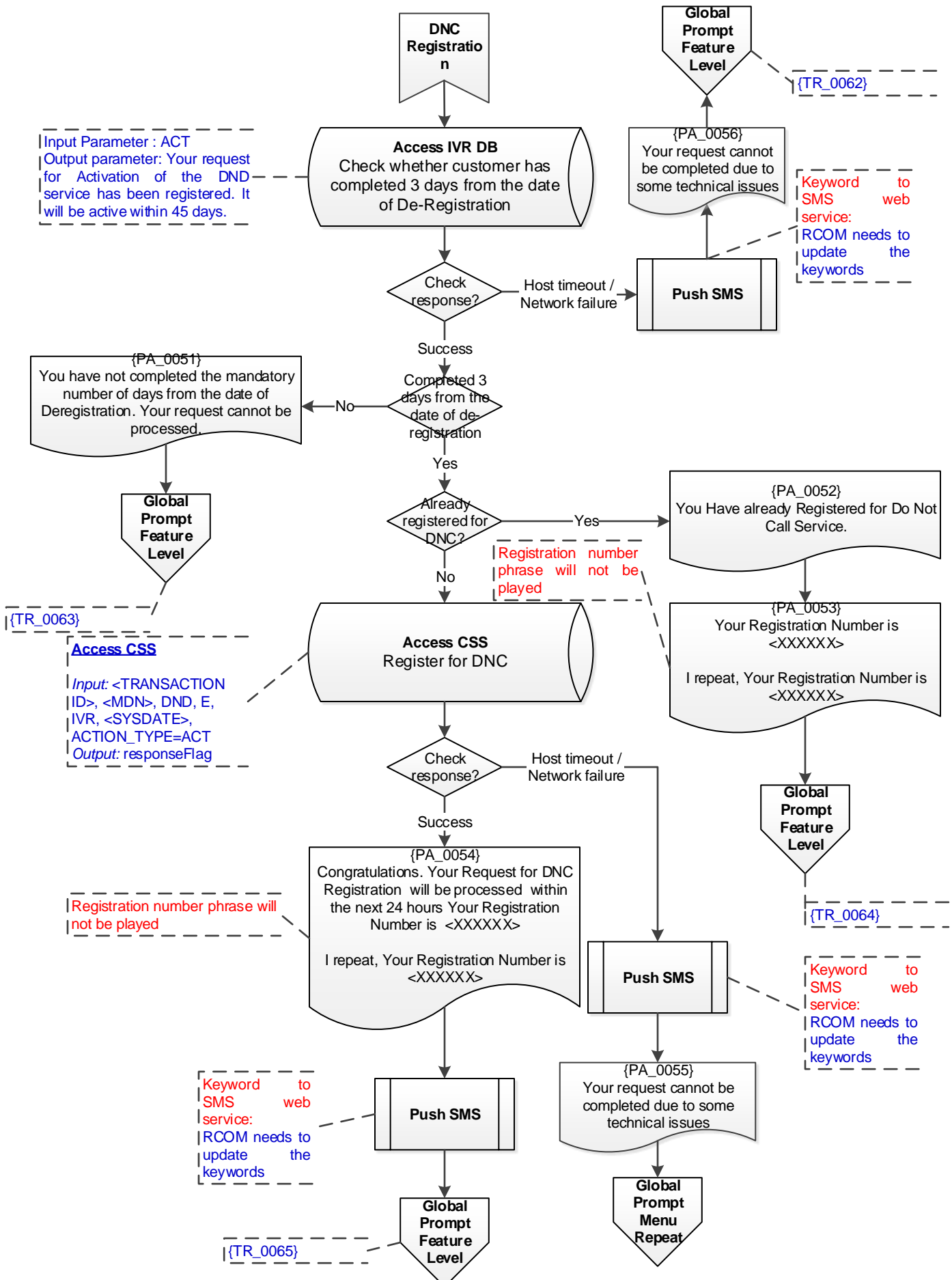


### ILD Activation

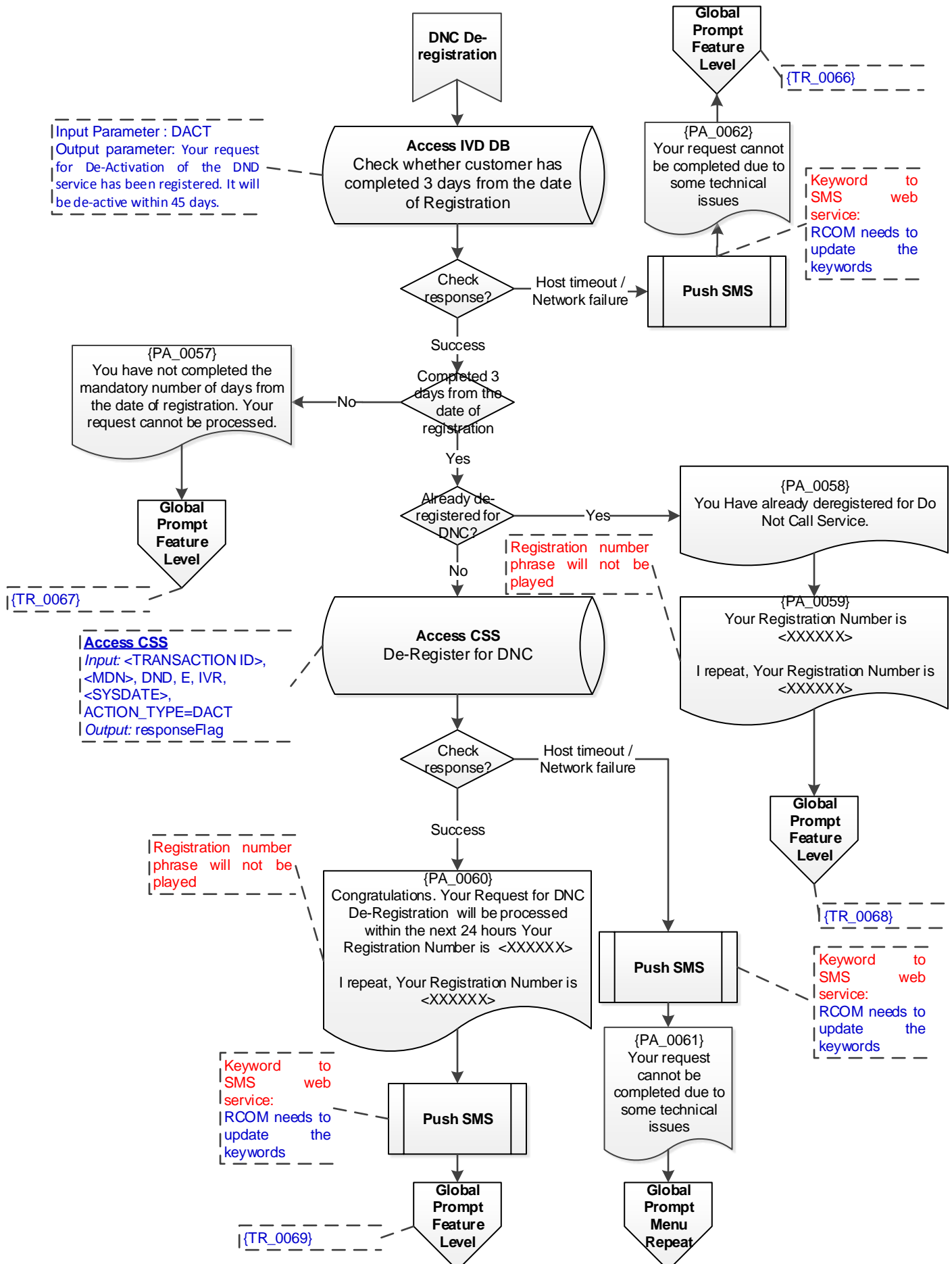


**Do Not Disturb**

## DNC Registration

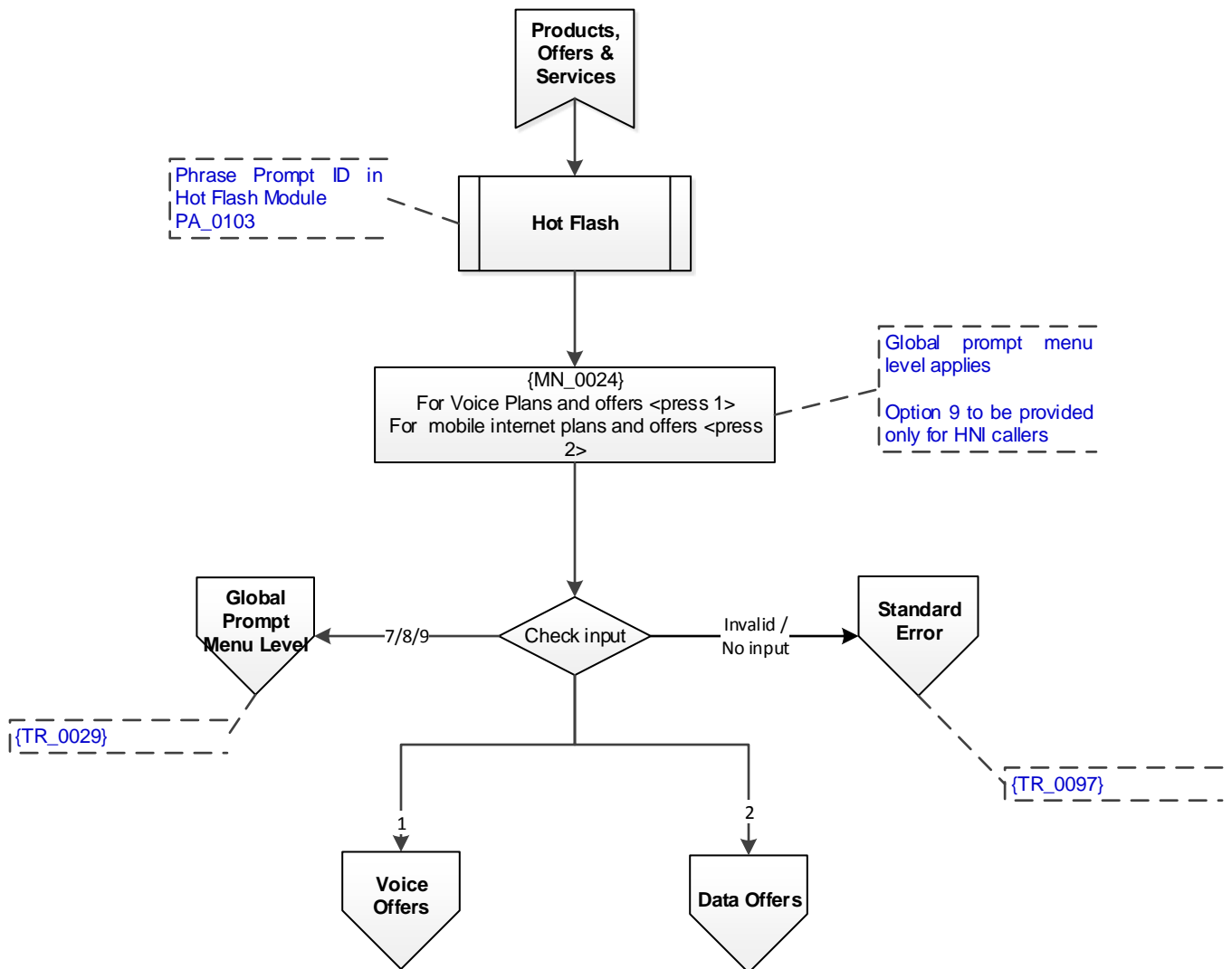


## DNC De-registration

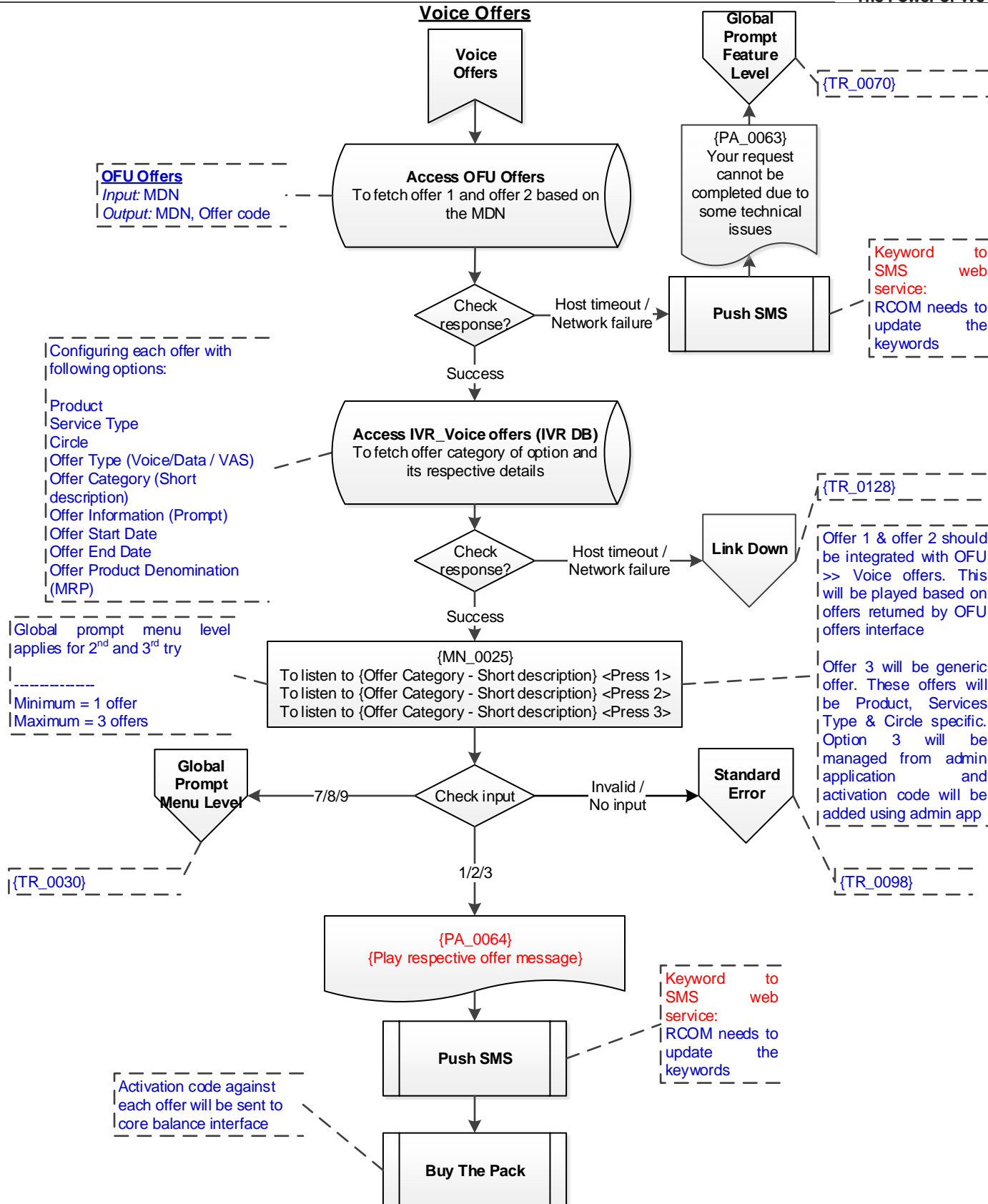




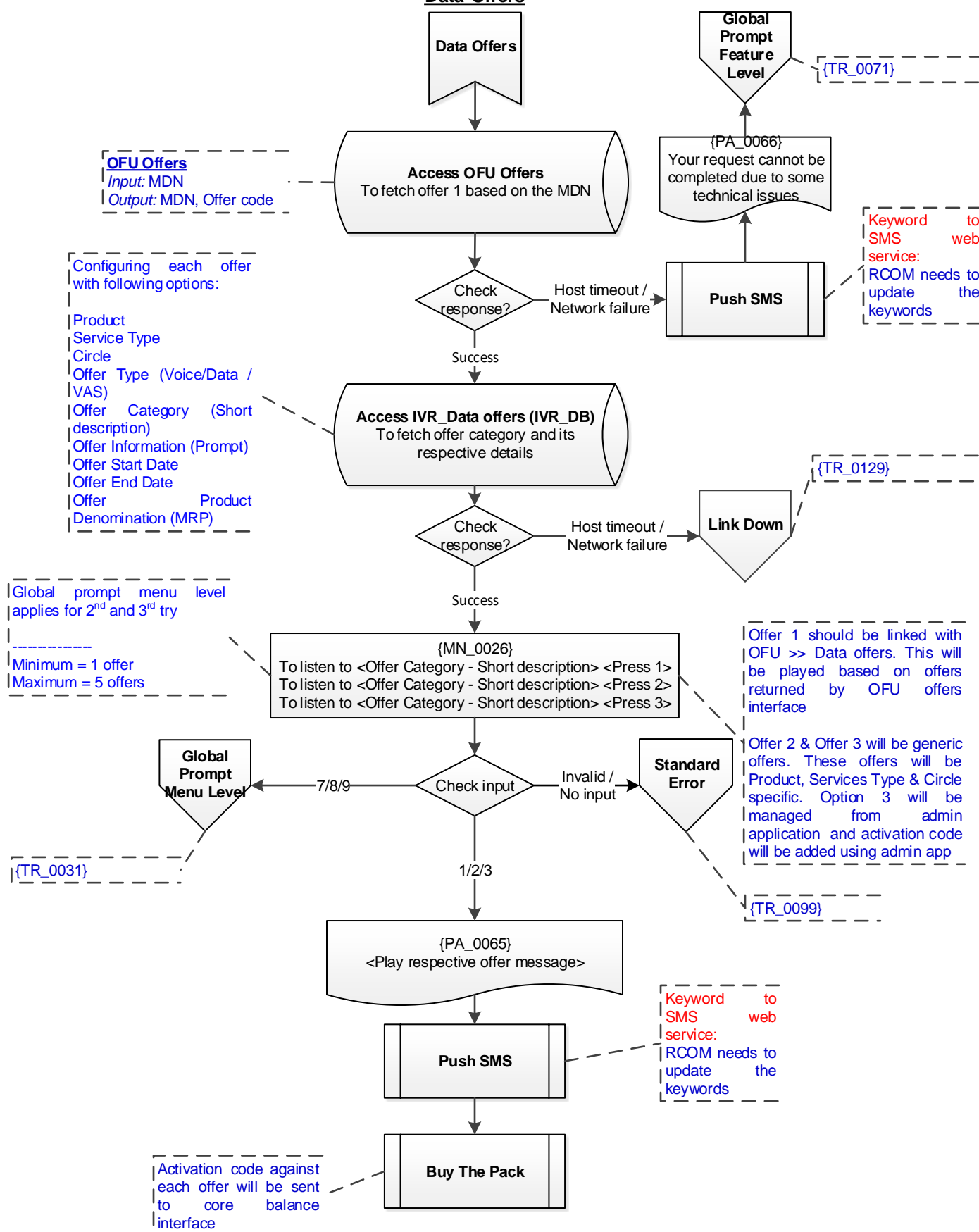
**Products, Offers & Services**



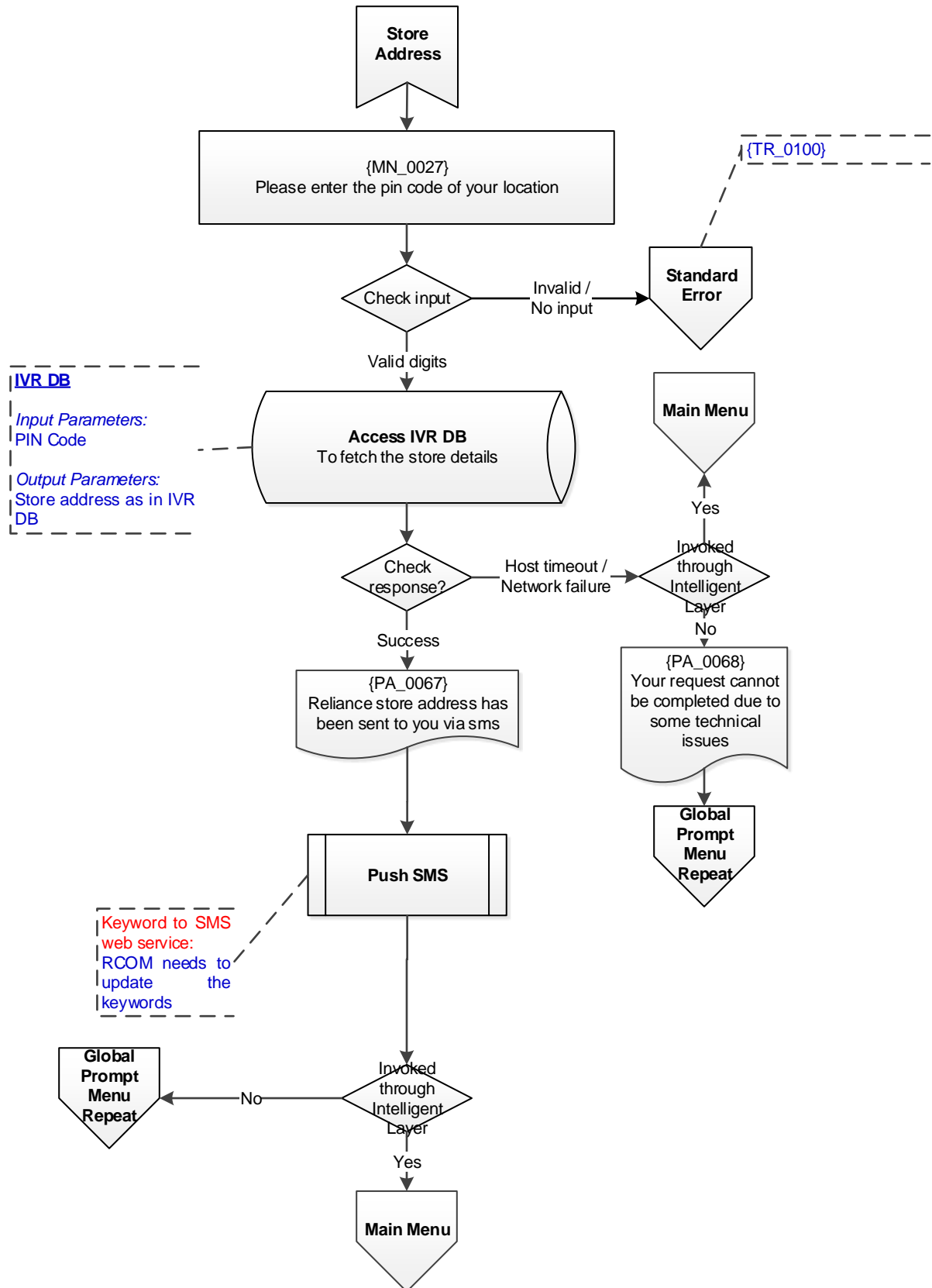
## Voice Offers



## Data Offers



### Store Address



## Buy The Pack

Buy The Pack

Number  
Verification

{MN\_0028}  
To activate this pack <press 1>

Check input

Invalid /  
No input

Standard  
Error

{TR\_0101}

Global  
Prompt  
Menu Level

7/8/9

{TR\_0032}

### Access CSS

Input: <COMMUNICATION\_ID>,  
<MDN>, <BUY>, E, IVR,  
PACK\_NAME, PACK\_VALUE  
Output: RESPONSE\_FLAG  
(1=SUCCESS)

Access CSS  
To activate the pack

Check  
response?

Host timeout /  
Network failure

Push SMS

Keyword to SMS  
web service:  
RCOM needs to  
update the  
keywords

{PA\_0071}  
Your request  
cannot be  
completed due to  
some technical  
issues

Global  
Prompt  
Feature  
Level

{TR\_0072}

Success

Check  
response?

Fail

{PA\_0070}  
Sorry we are  
unable to process  
your request.

Transfer  
Agent

{TR\_0016}

Success

{PA\_0069}  
Your request to activate the pack has been  
successful. Your transaction ID is <number>

Push SMS

Keyword to SMS  
web service:  
RCOM needs to  
update the  
keywords

Global  
Prompt  
Feature  
Level

{TR\_0073}

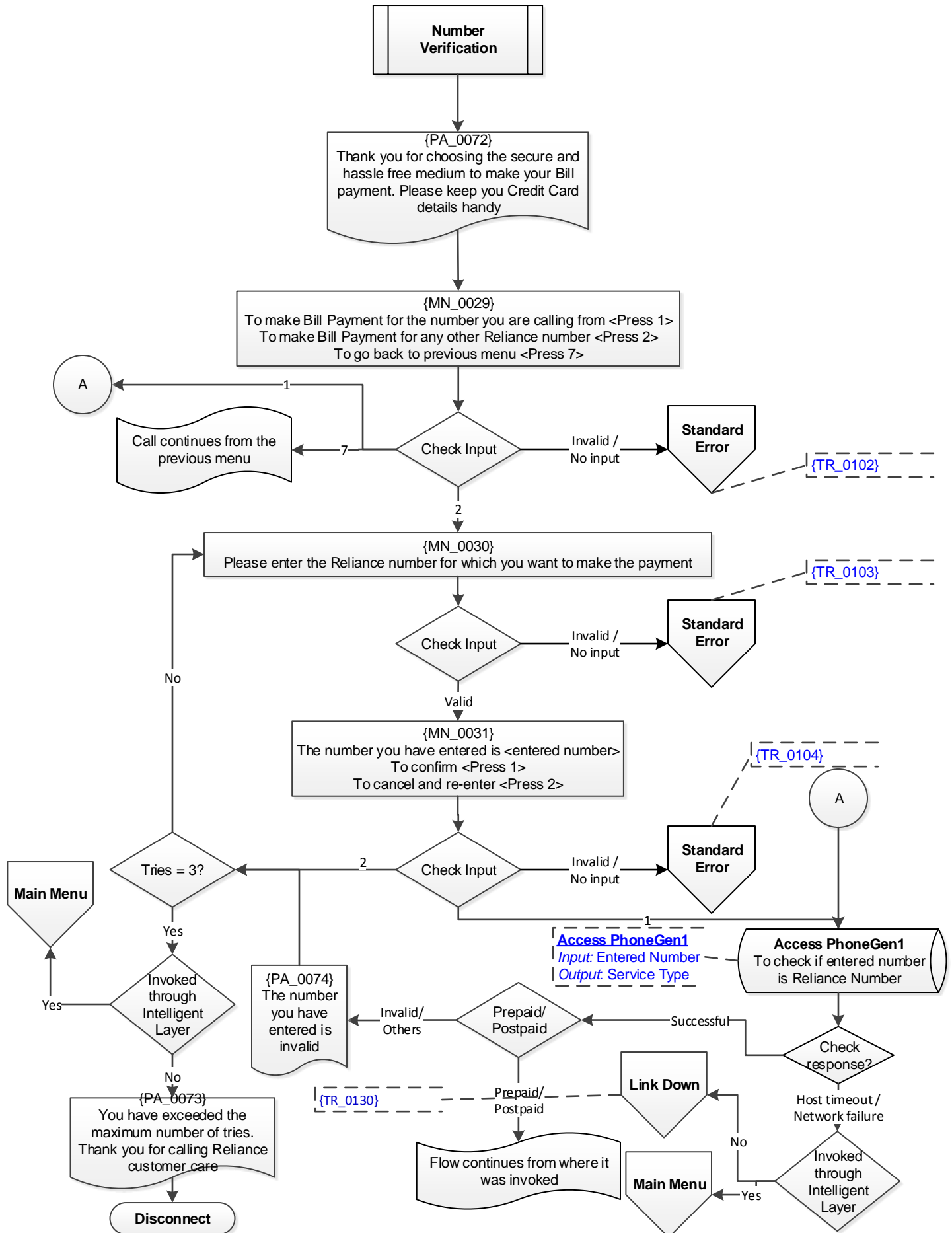
Invoked  
through  
Intelligent  
Layer

No

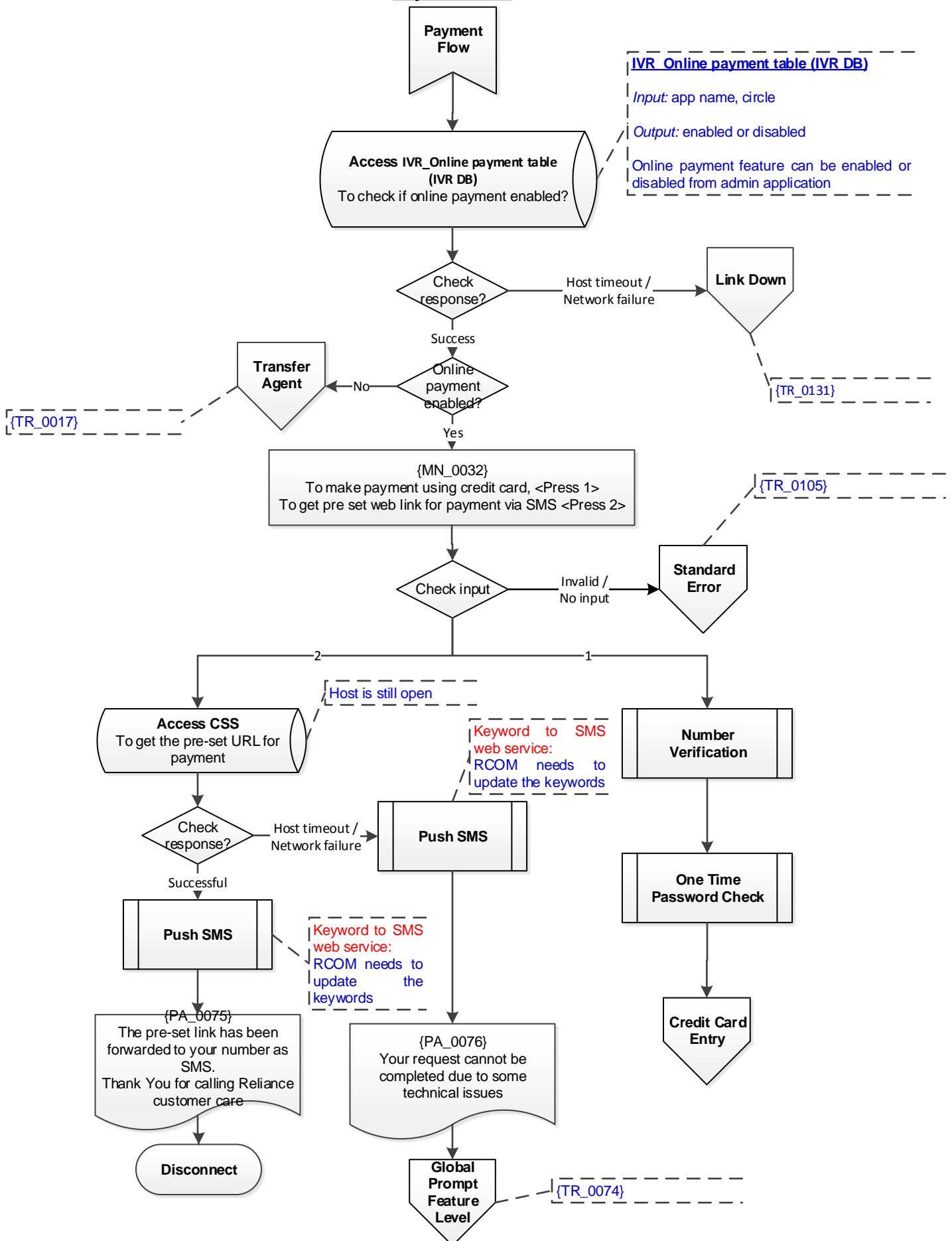
Yes

Main Menu

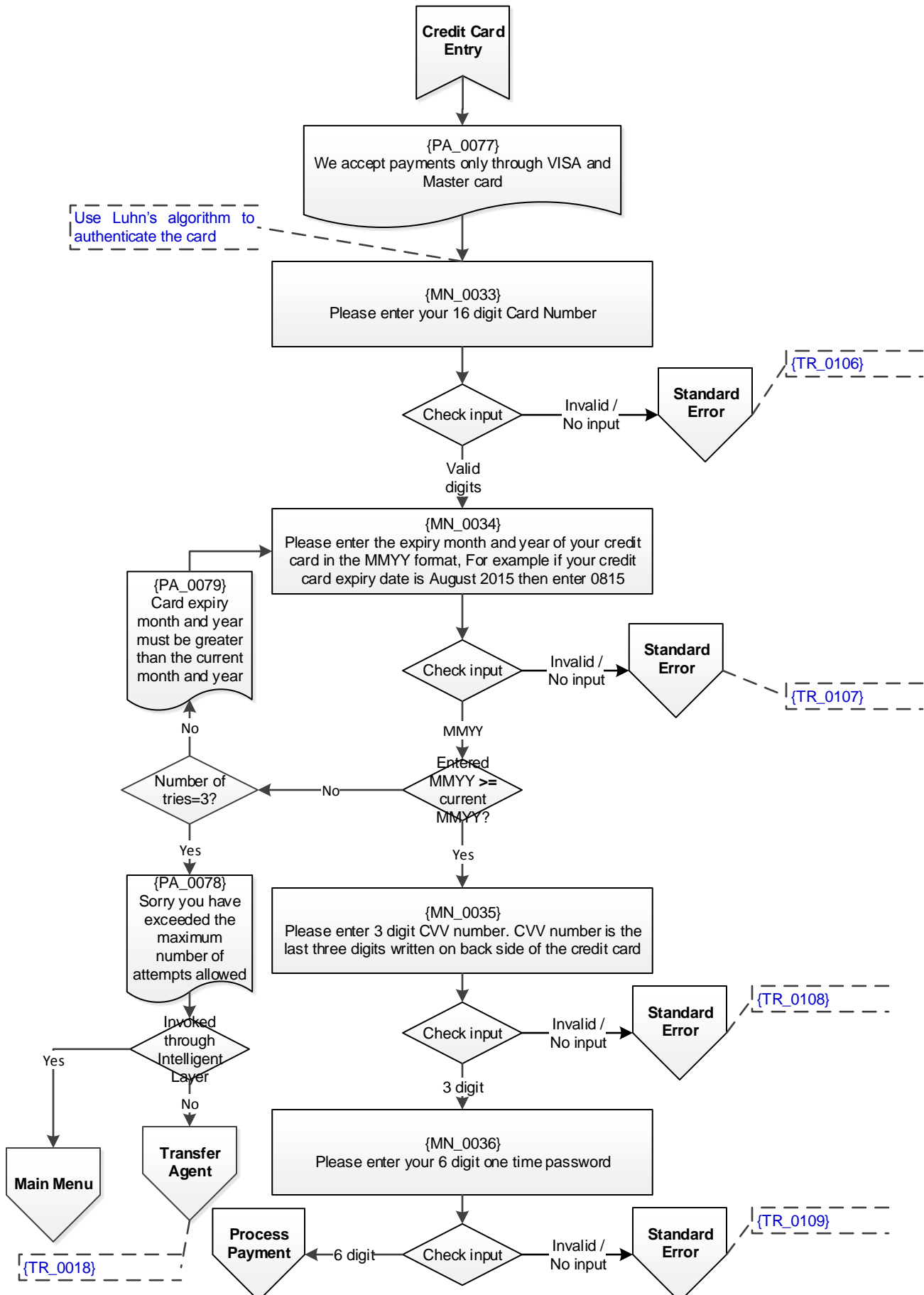
## Number Verification



## Payment Flow

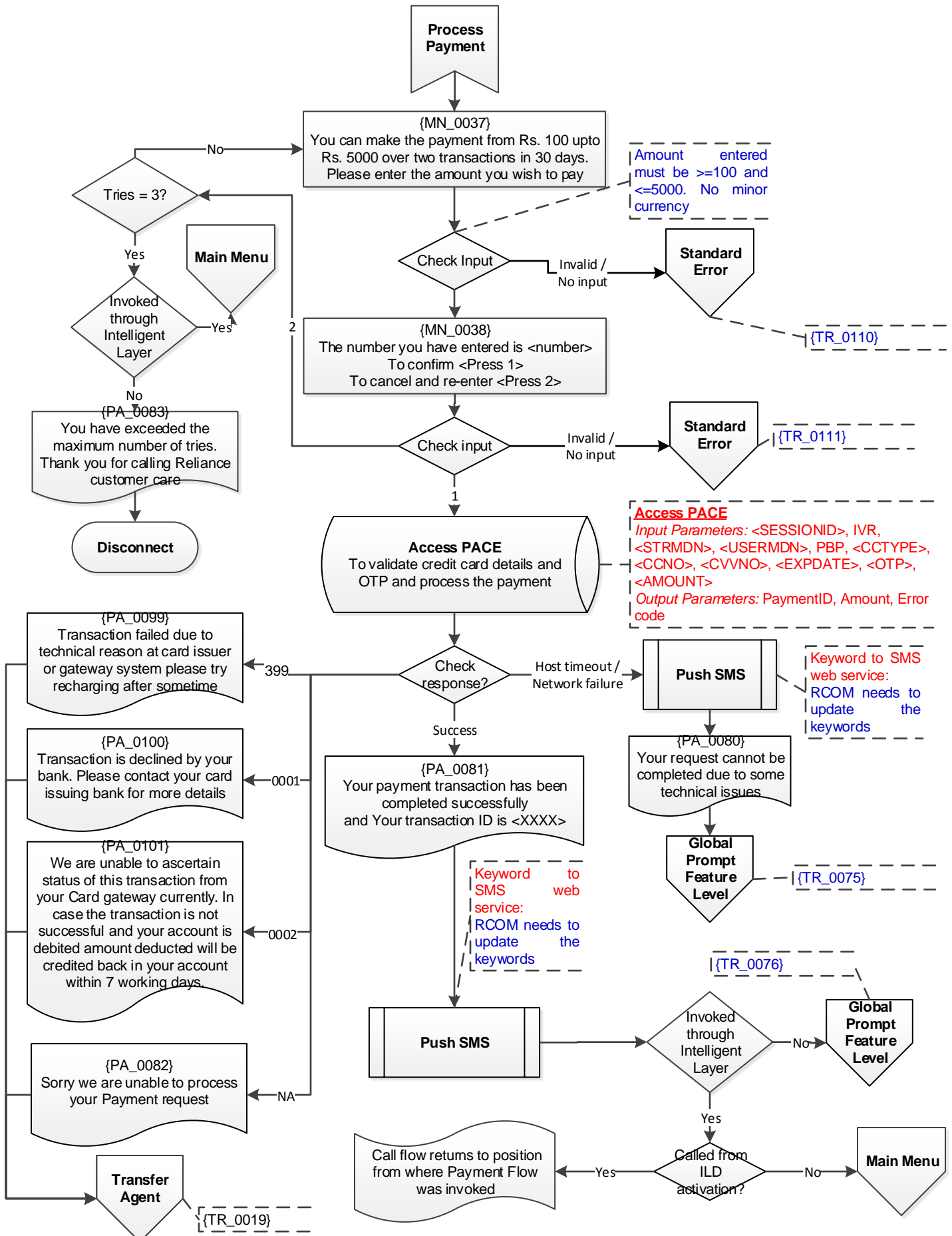


### Credit Card Entry

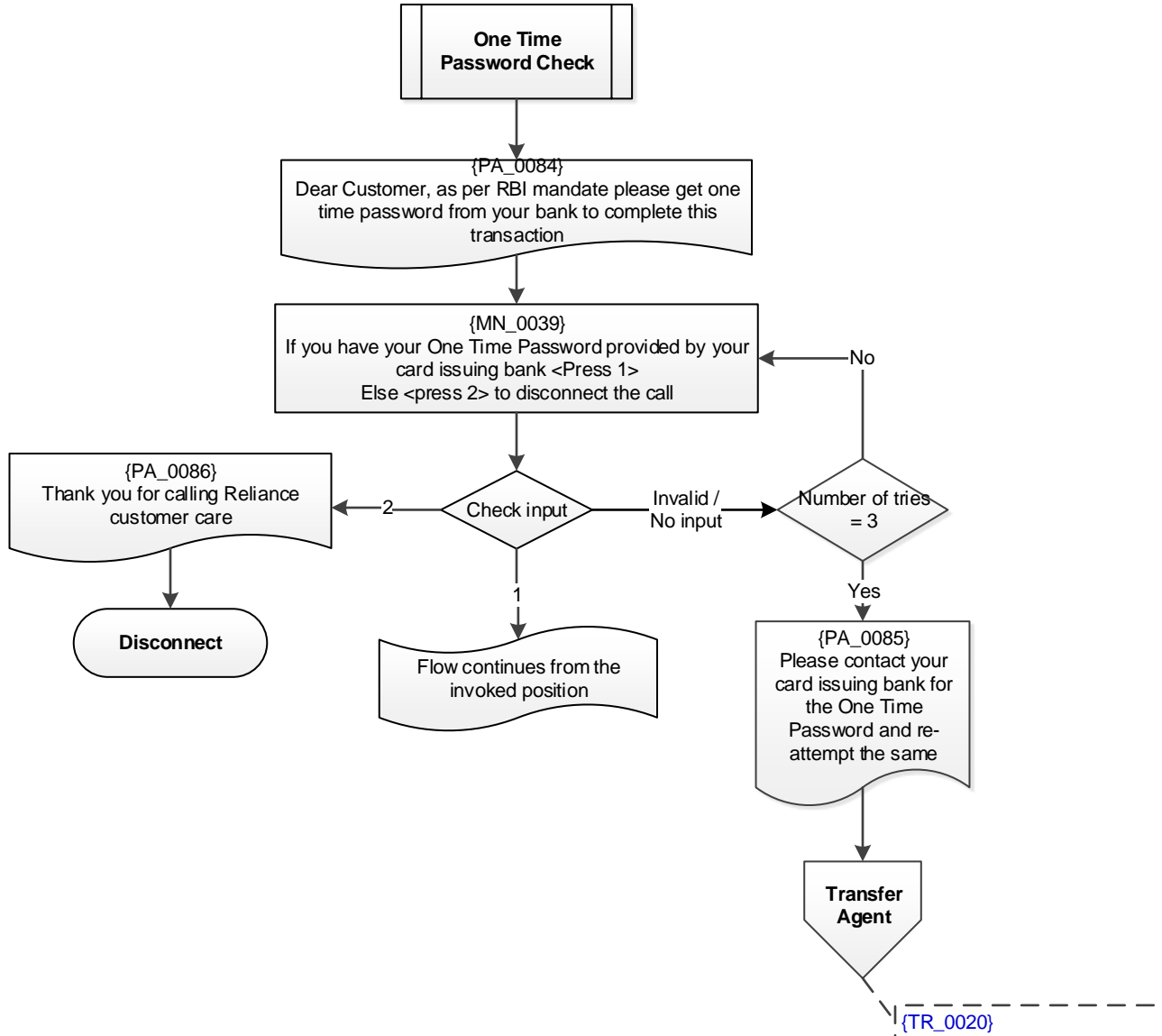




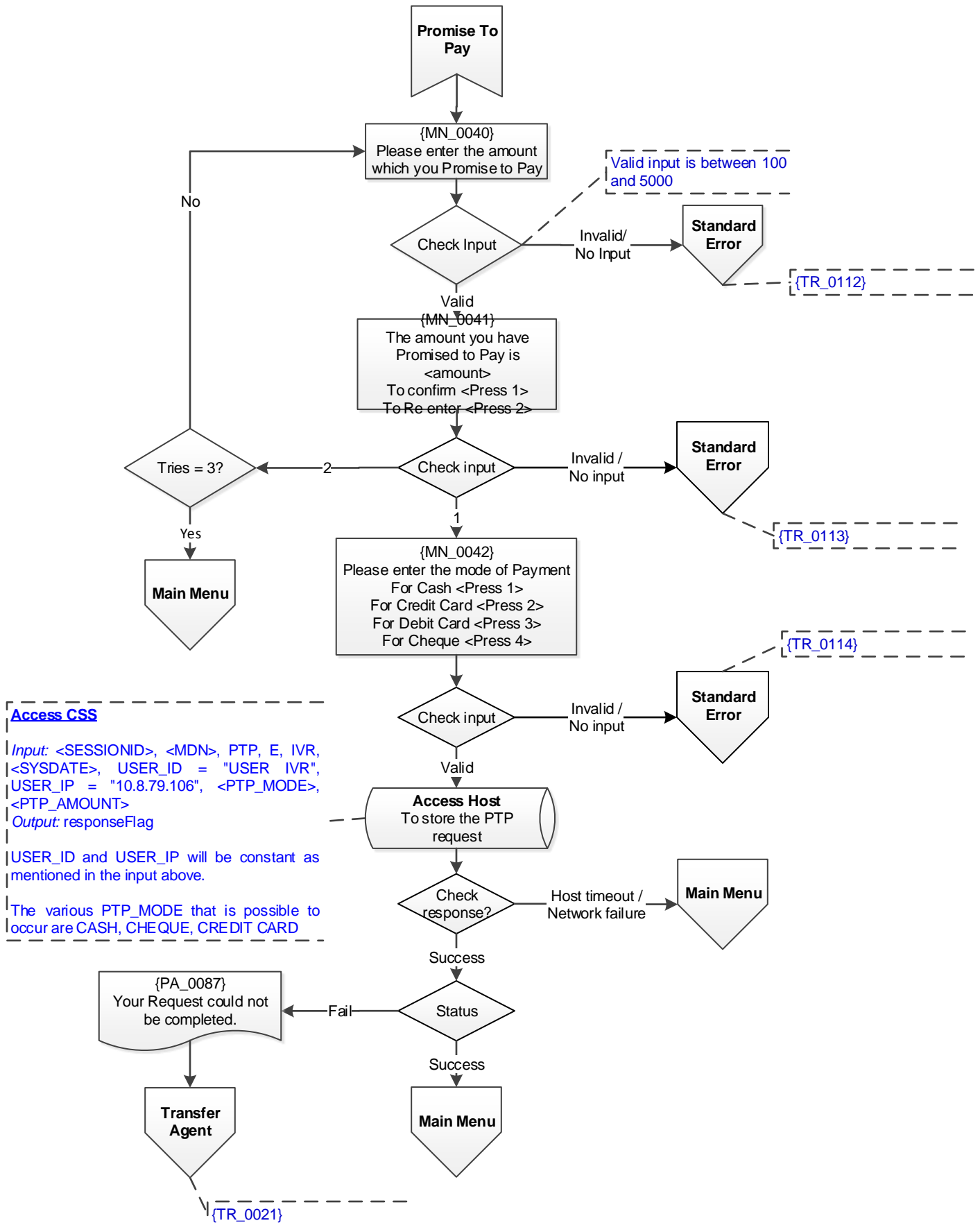
## Process Payment



### One Time Password Check



## Promise To Pay



## Change Language

Menu will be played based on Circle

The present preferred language will be omitted from the list

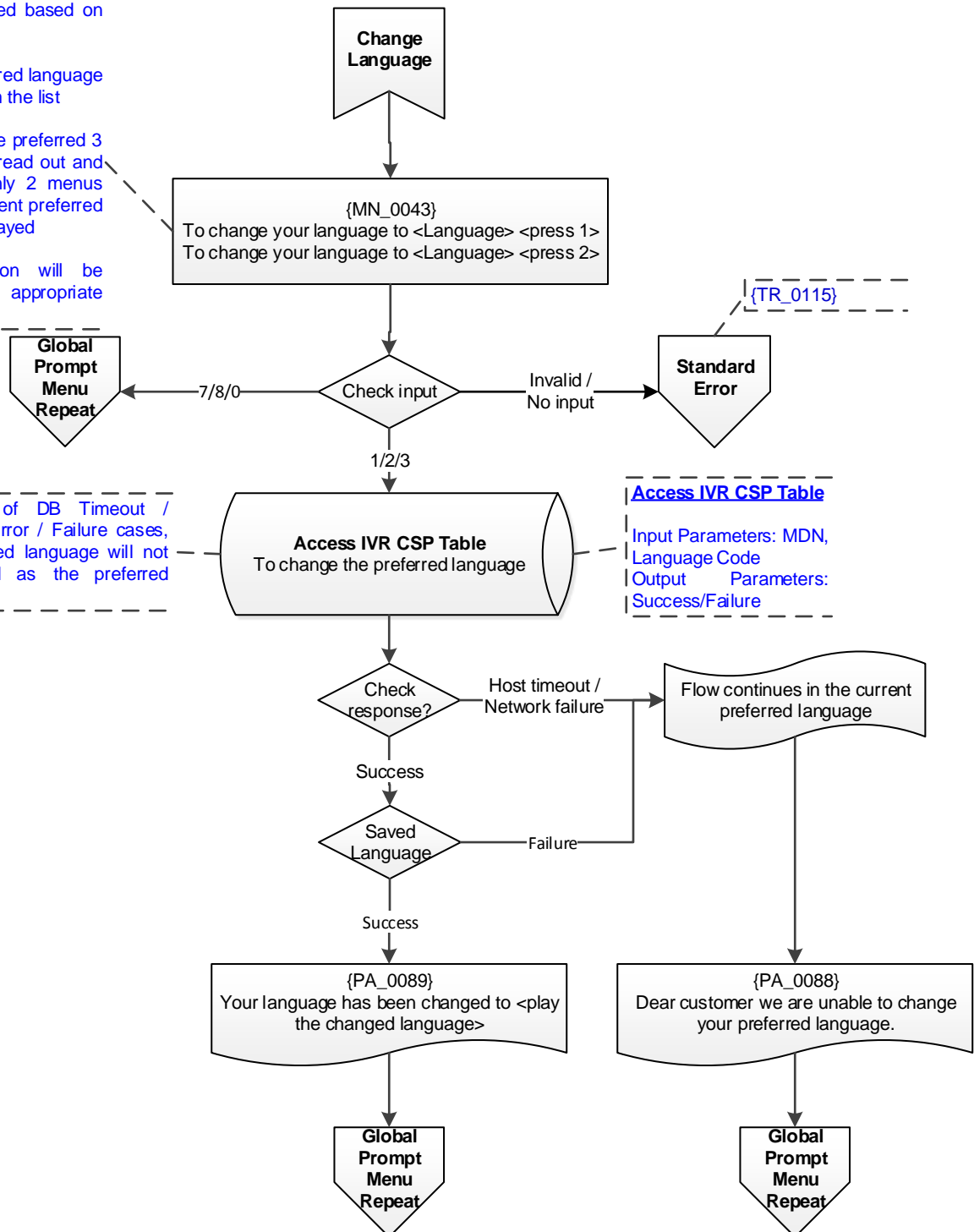
First time alone the preferred 3 languages will be read out and all other times only 2 menus that is not the current preferred language will be played

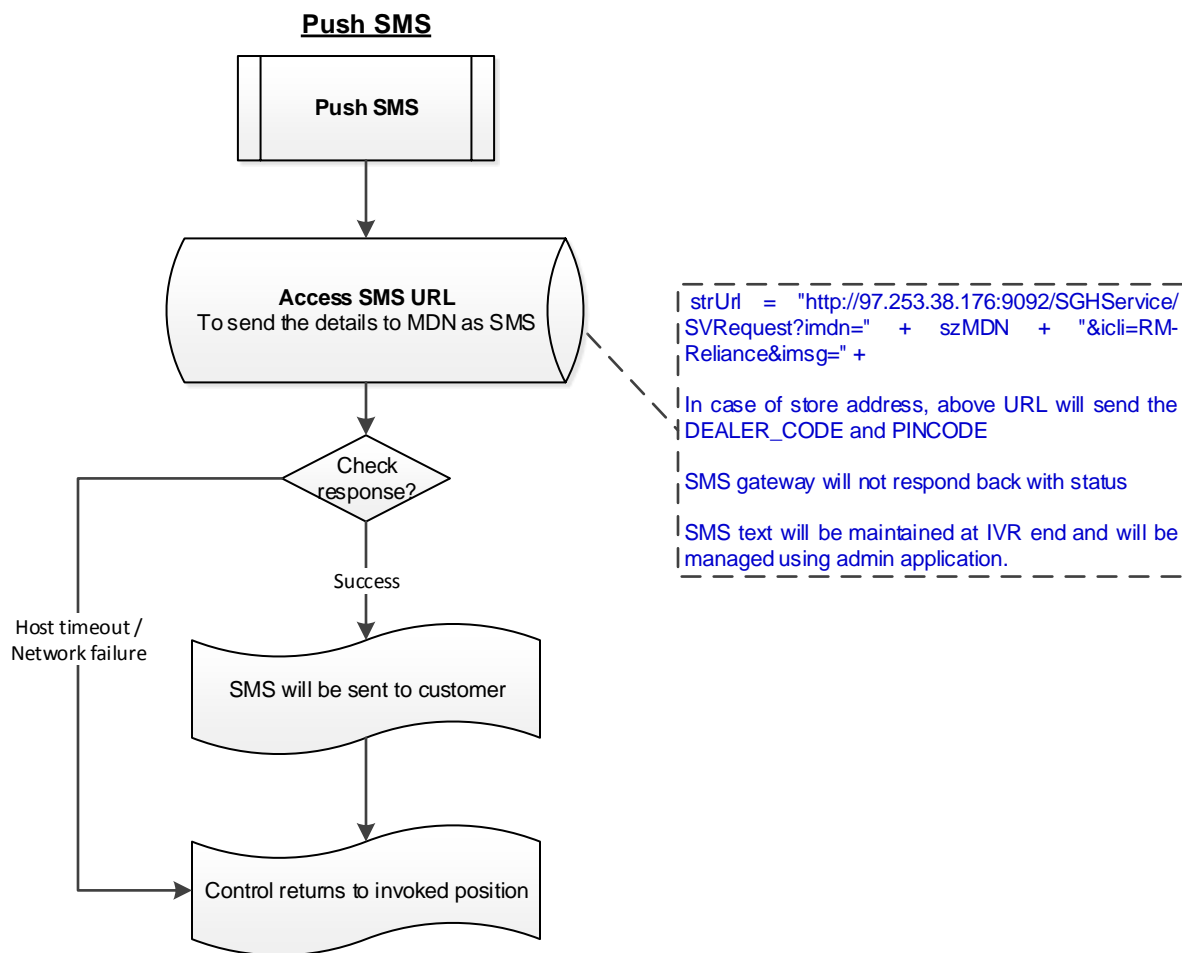
Each menu option will be played in the appropriate language

In case of DB Timeout / Network Error / Failure cases, the selected language will not be stored as the preferred language.

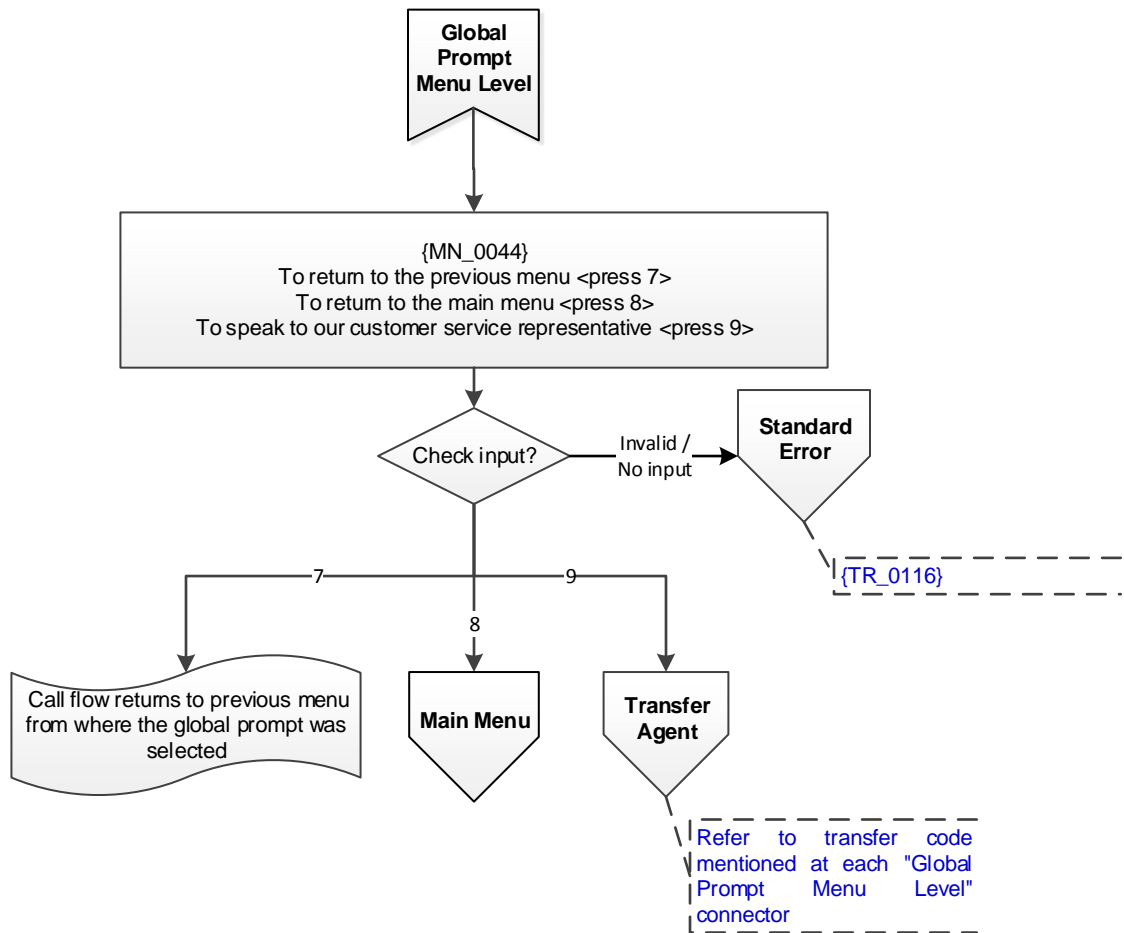
Access IVR CSP Table

Input Parameters: MDN, Language Code  
Output Parameters: Success/Failure

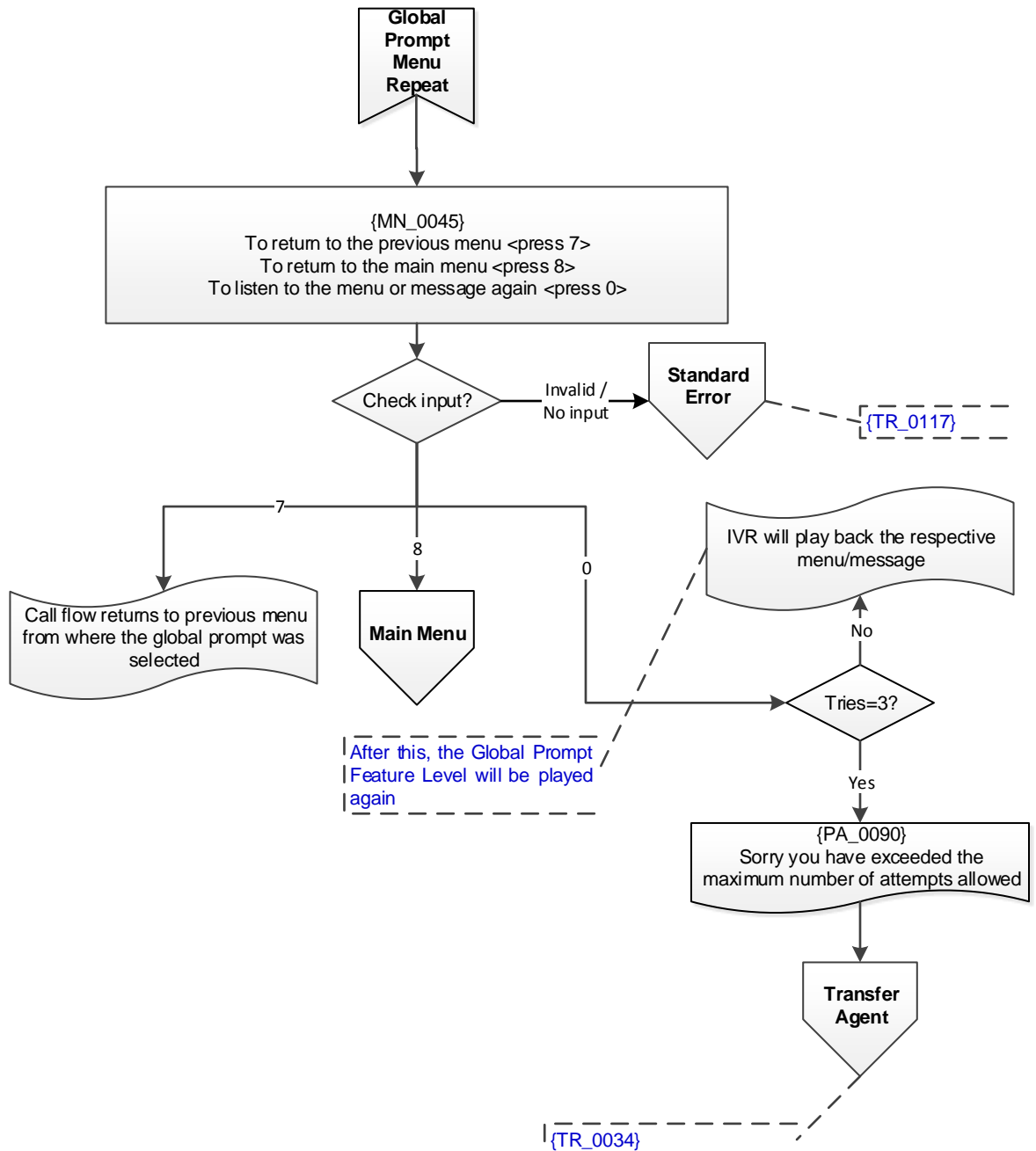




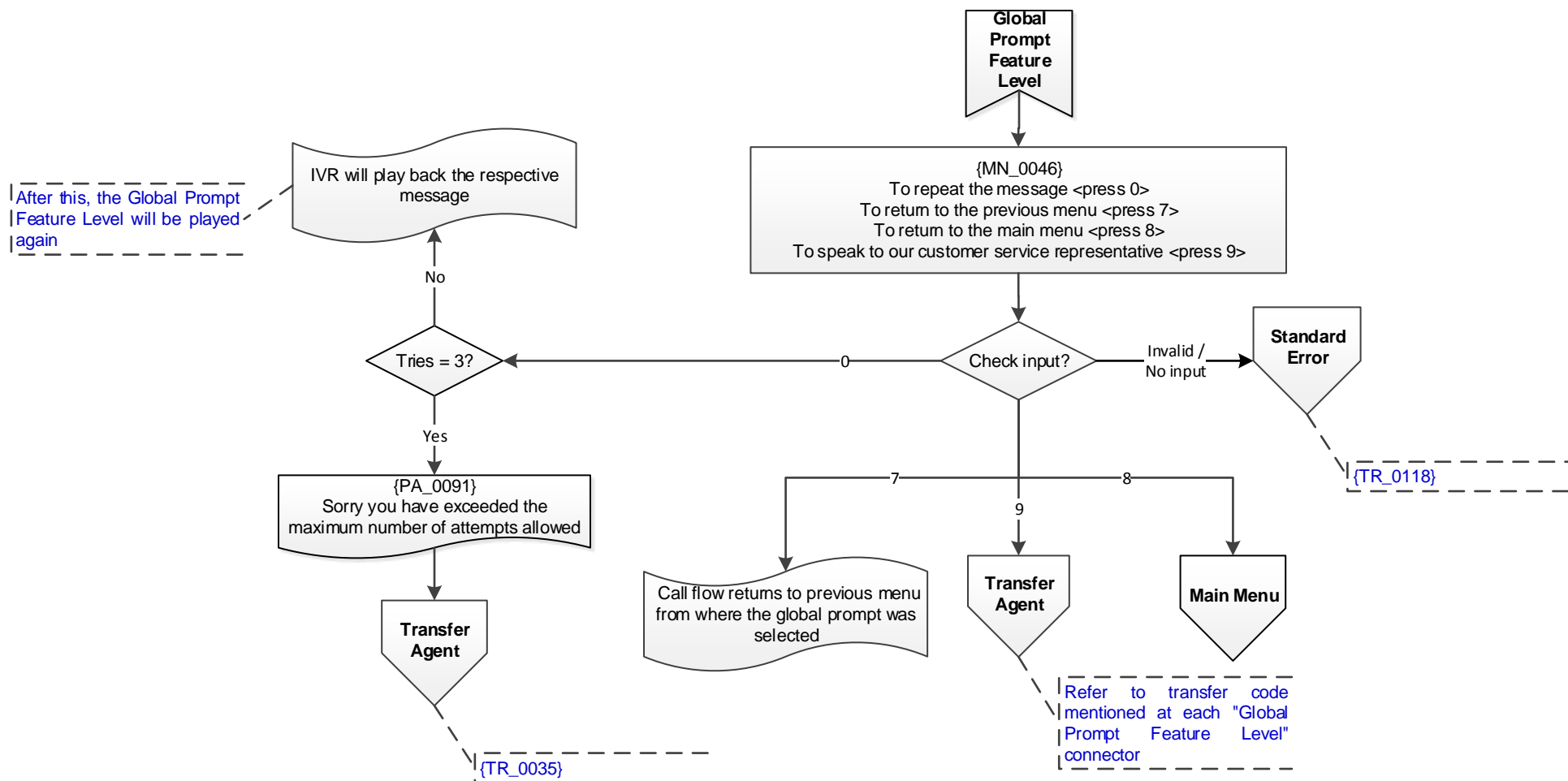
### Global Prompt Menu Level



### Global Prompt Menu Repeat



**Global Prompt Feature Level**



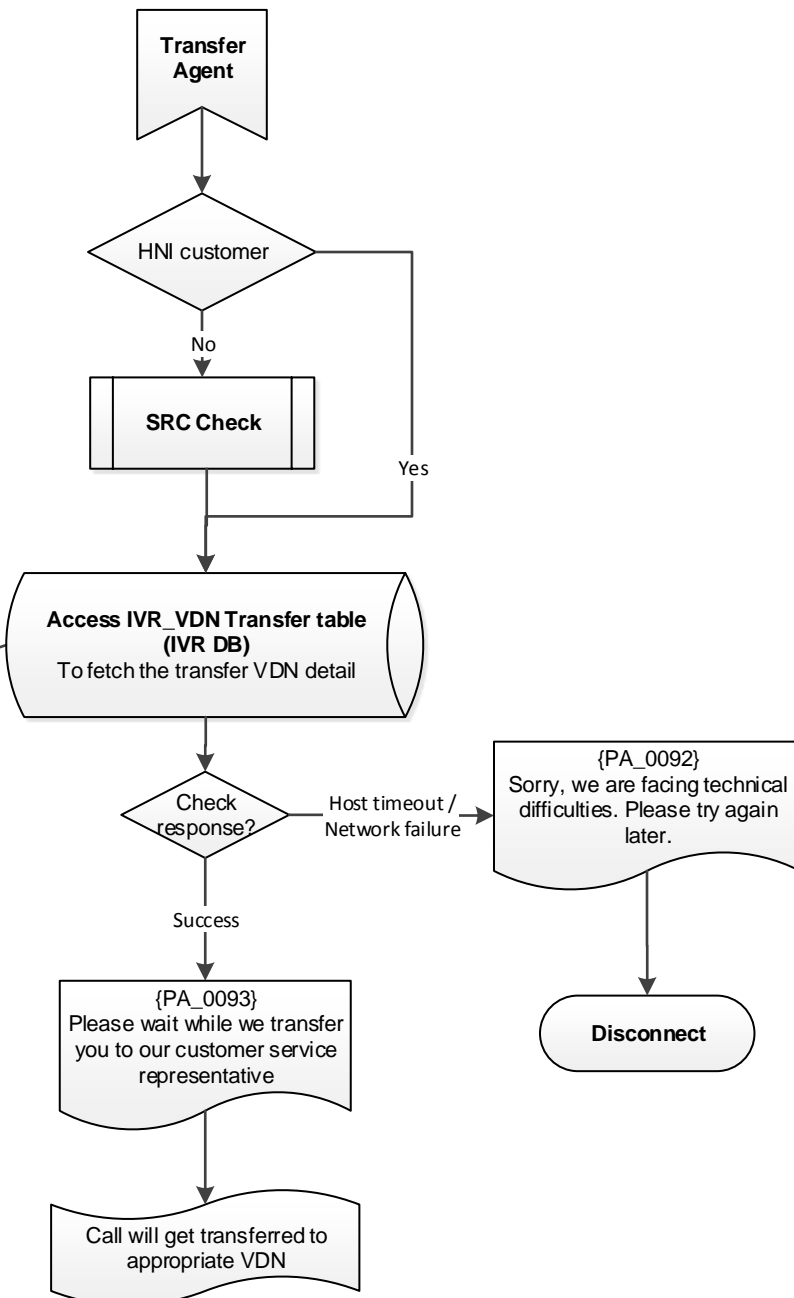


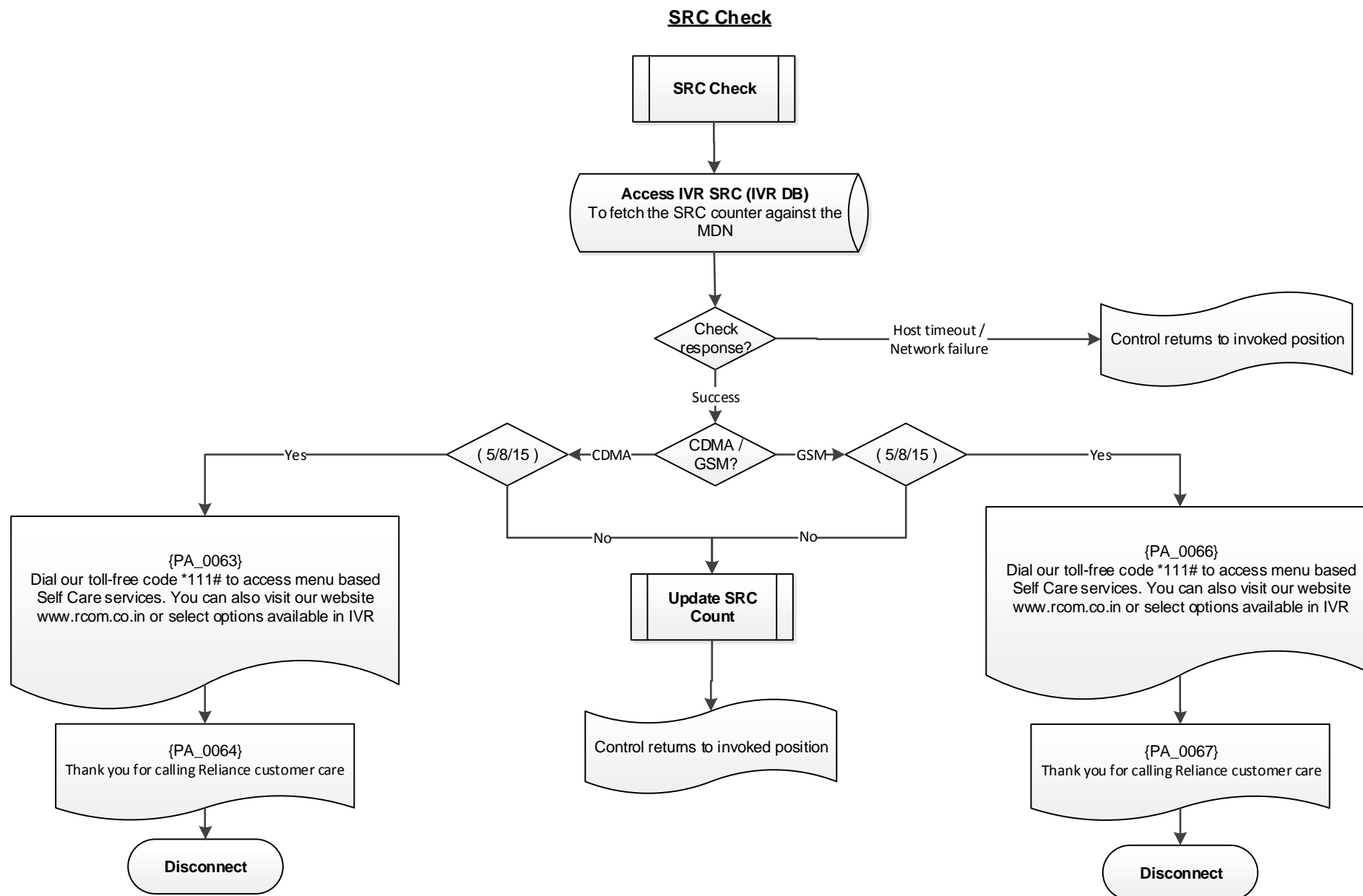
**IVR call variables:**

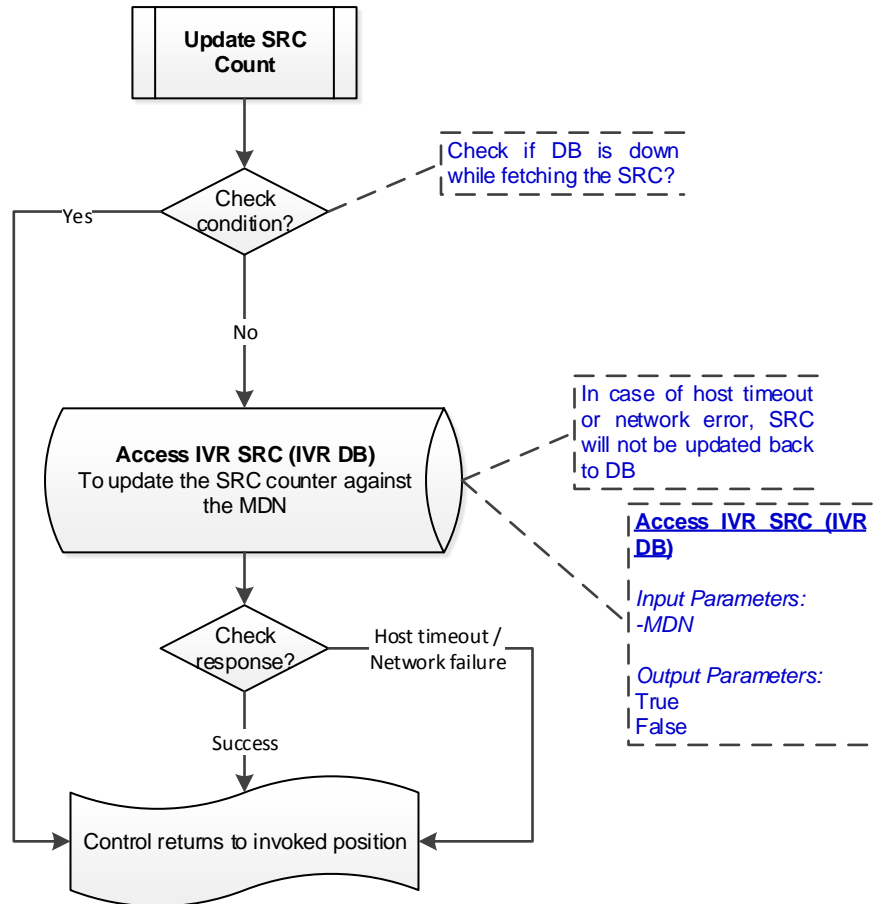
1. ANI
2. DNIS
3. Language selected / Default language (E=English, H=Hindi)
- 4/ Last 5 menu accessed
5. Transfer reason code

Access IVR\_VDN\_Transfer Table  
Input:  
 App name  
 Language  
 Circle  
 Customer segment (gold / silver / HNI)  
 Call type (request / complaints)  
Output:  
 Transfer VDN1  
 Transfer VDN2  
 VDN 1 / VDN 2 down flag

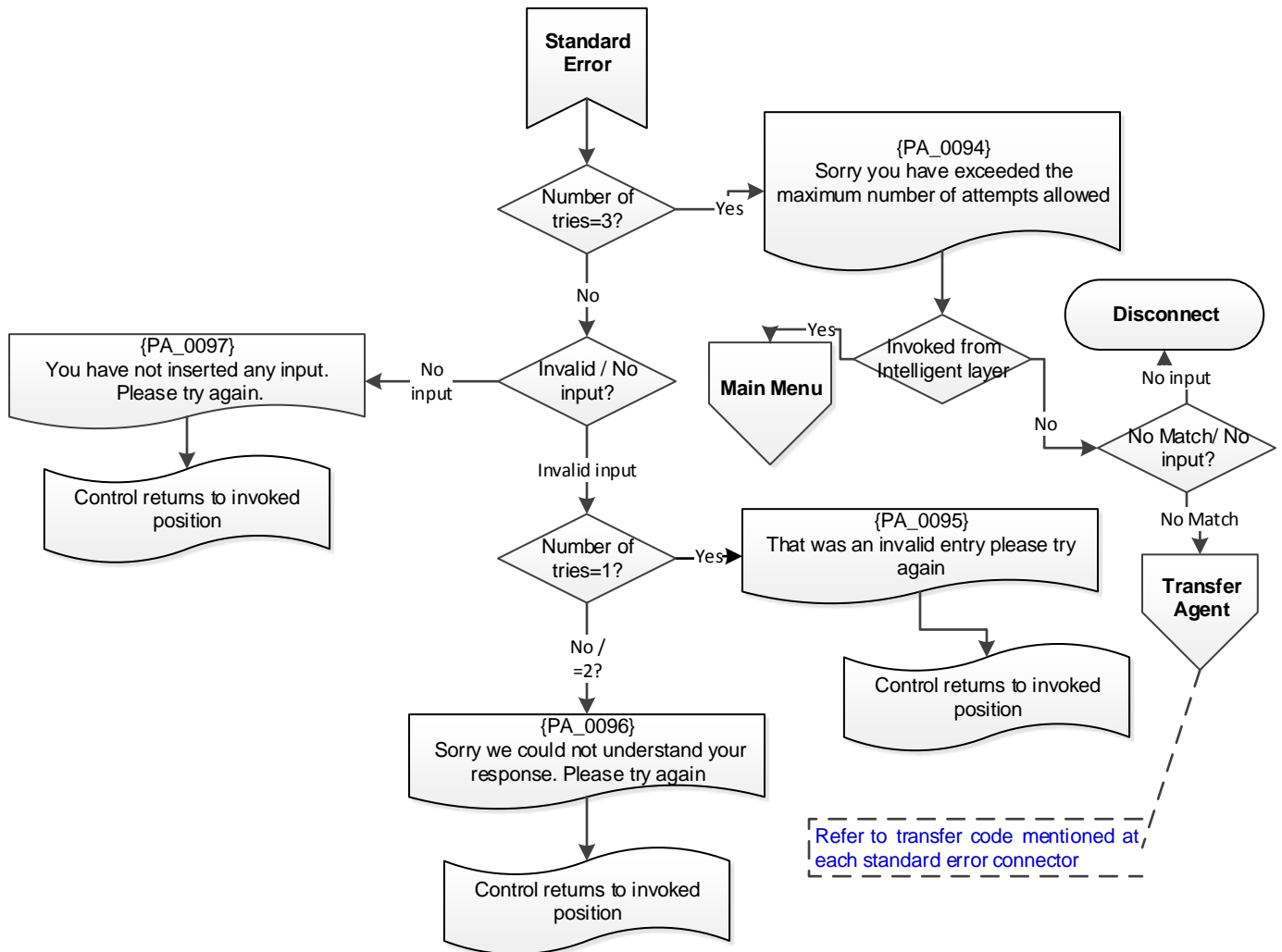
**Transfer Agent**





**Update SRC Count**

### Standard Error



**Link Down**

