**3GPP TSG CT WG3 Meeting #135 *C3-243425***

**Hyderabad, IN, 27th – 31st May, 2024 (was C3-243205)**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **29.583** | **CR** | **0005** | **rev** | **2** | **Current version:** | **18.0.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Corrections to PIN\_ASRegistration data model and open API |
|  |  |
| ***Source to WG:*** | Nokia  |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | PINAPP |  | ***Date:*** | 2024-05-20 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | Following items were identified that require corrections: 1. Typos: Manadatory -> Mandatory, code -> codes
2. apiRoot reference in the open API is indicated as 6.3 instead of 6.1.1
3. 6.3.6.2.2 Type: ServiceContinuityInfo, "suppFeat" attribute description, the reference is incorrect (6.2.8 instead of 6.3.8)
 |
|  |  |
| ***Summary of change:*** | Above indicated clauses are corrected to align data model with the open API. |
|  |  |
| ***Consequences if not approved:*** | Bad quality stage-3 specification. |
|  |  |
| ***Clauses affected:*** | 6.2.3.3.3.1, 6.2.3.3.3.2, 6.2.3.3.3.3, 6.2.5.1.3.1, 6.3.3.3.1, 6.3.3.3.3.2, 6.3.3.3.3.3, 6.3.5.1.3.1, 6.3.6.2.2 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR does not impact any open API defined in this specification. |
|  |  |
| ***This CR's revision history:*** | Rev1: corrected the coverpage with current TS number and version details. |

\* \* \* \* First change \* \* \* \*

###### 6.2.3.3.3.1 GET

This method retrieves the service switch information subscription information at PIN server. This method shall support the URI query parameters specified in the table 6.2.3.3.3.1-1.

Table 6.2.3.3.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.3.3.3.1-2 and the response data structures and response codes specified in table 6.2.3.3.3.1-3.

Table 6.2.3.3.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.3.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceSwitchInfo | M | 1 | 200 OK | The service switch information subscription information is returned by the PIN server. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.2.3.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

Table 6.2.3.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

\* \* \* \* Next change \* \* \* \*

###### 6.2.3.3.3.2 PATCH

This method partially updates the individual service switch information subscription information at the PIN server. This method shall support the URI query parameters specified in the table 6.2.3.3.3.2-1.

Table 6.2.3.3.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.3.3.3.2-2 and the response data structures and response codes specified in table 6.2.3.3.3.2-3.

Table 6.2.3.3.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceSwitchInfoPatch | M | 1 | Request to partially update the individual service information subscription matching the subscriptionId at the PIN server. |

Table 6.2.3.3.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceSwitchInfo | M | 1 | 200 OK | The individual service switch information subscription matching the subscriptionId was modified successfully and the updated service switch information subscription information is returned in the response. |
| n/a |  |  | 204 No Content | The individual service switch information subscription matching the subscriptionId was modified successfully. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.2.3.3.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

Table 6.2.3.3.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

\* \* \* \* Next change \* \* \* \*

###### 6.2.3.3.3.3 PUT

This method updates the service switch information subscription information at the PIN server by completely replacing the existing subscription data. This method shall support the URI query parameters specified in the table 6.2.3.3.3.3-1.

Table 6.2.3.3.3.3-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.3.3.3.3-2 and the response data structures and response codes specified in table 6.2.3.3.3.3-3.

Table 6.2.3.3.3.3-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceSwitchInfo | M | 1 | Details of individual service switch information subscription matching the subscriptionId to be updated at the PIN server. |

Table 6.2.3.3.3.3-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceSwitchInfo | M | 1 | 200 OK | The individual service switch information subscription matching the subscriptionId was modified successfully and the updated service switch subscription information is returned in the response. |
| n/a |  |  | 204 No Content | The individual service switch information subscription matching the subscriptionId was modified successfully. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.2.3.3.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

Table 6.2.3.3.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

\* \* \* \* Next change \* \* \* \*

###### 6.2.5.1.3.1 POST

This method shall support the request data structures specified in table 6.2.5.1.3.1-1 and the response data structures and response codes specified in table 6.2.5.1.3.1-2.

Table 6.2.5.1.3.1-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceSwitchInfoNotification | M | 1 | Notification of service switch information. |

Table 6.2.5.1.3.1-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The receipt of the Notification is acknowledged. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI representing the end point of an alternative EAS where the notification should be sent.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI representing the end point of an alternative EAS where the notification should be sent.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.2.5.1.3.1-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative PAS towards which the notification should be redirected. |

Table 6.2.5.1.3.1-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative PAS towards which the notification should be redirected. |

\* \* \* \* Next change \* \* \* \*

###### 6.3.3.3.3.1 GET

This method retrieves the service continuity information subscription information at PIN server. This method shall support the URI query parameters specified in the table 6.3.3.3.3.1-1.

Table 6.3.3.3.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.3.3.3.3.1-2 and the response data structures and response codes specified in table 6.3.3.3.3.1-3.

Table 6.3.3.3.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.3.3.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceContinuityInfo | M | 1 | 200 OK | The service continuity information subscription information is returned by the PIN server. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.3.3.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

Table 6.3.3.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

\* \* \* \* Next change \* \* \* \*

###### 6.3.3.3.3.2 PATCH

This method partially updates the individual service continuity information subscription information at the PIN server. This method shall support the URI query parameters specified in the table 6.3.3.3.3.2-1.

Table 6.3.3.3.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.3.3.3.3.2-2 and the response data structures and response codes specified in table 6.3.3.3.3.2-3.

Table 6.3.3.3.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceContinuityInfoPatch | M | 1 | Request to partially update the individual service information subscription matching the subscriptionId at the PIN server. |

Table 6.3.3.3.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceContinuityInfo | M | 1 | 200 OK | The individual service continuity information subscription matching the subscriptionId was modified successfully and the updated service continuity information subscription information is returned in the response. |
| n/a |  |  | 204 No Content | The individual service continuity information subscription matching the subscriptionId was modified successfully. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The manadtory HTTP error status codes for the PATCH method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.3.3.3.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

Table 6.3.3.3.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

\* \* \* \* Next change \* \* \* \*

###### 6.3.3.3.3.3 PUT

This method updates the service continuity information subscription information at the PIN server by completely replacing the existing subscription data. This method shall support the URI query parameters specified in the table 6.3.3.3.3.3-1.

Table 6.3.3.3.3.3-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.3.3.3.3.3-2 and the response data structures and response codes specified in table 6.3.3.3.3.3-3.

Table 6.3.3.3.3.3-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceContinuityInfo | M | 1 | Details of individual service continuity information subscription matching the subscriptionId to be updated at the PIN server. |

Table 6.3.3.3.3.3-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceContinuityInfo | M | 1 | 200 OK | The individual service continuity information subscription matching the subscriptionId was modified successfully and the updated service continuity subscription information is returned in the response. |
| n/a |  |  | 204 No Content | The individual service continuity information subscription matching the subscriptionId was modified successfully. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.3.3.3.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

Table 6.3.3.3.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative PIN server. |

\* \* \* \* Next change \* \* \* \*

###### 6.3.5.1.3.1 POST

This method shall support the request data structures specified in table 6.3.5.1.3.1-1 and the response data structures and response codes specified in table 6.3.5.1.3.1-2.

Table 6.3.5.1.3.1-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceContinuityInfoNotification | M | 1 | Notification of service continuity information. |

Table 6.3.5.1.3.1-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The receipt of the Notification is acknowledged. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI representing the end point of an alternative EAS where the notification should be sent.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI representing the end point of an alternative EAS where the notification should be sent.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.3.5.1.3.1-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative PAS towards which the notification should be redirected. |

Table 6.3.5.1.3.1-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative PAS towards which the notification should be redirected. |

\* \* \* \* Next change \* \* \* \*

##### 6.3.6.2.2 Type: ServiceContinuityInfo

Table 6.3.6.2.2-1: Definition of type ServiceContinuityInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| subsEvent | EventType | M | 1 | Identifies the event type for which the subscriber is to be notified.  |  |
| notificationAddr | Uri | M | 1 | URI where the notification should be delivered to. This attribute shall be present in HTTP POST message to PIN server and maybe present in HTTP PUT request. |  |
| pinId | string | M | 1 | Identifies a PIN. (see 3GPP TS 23.542 [10]).Its encoding shall comply with the UE policy part type URSP as defined inclause 5.2 of3GPP TS 24.526 [12]. |  |
| expTime | DateTime | O | 0..1 | Indicates the expiration time of the subscription. To maintain an active registration status, a registration update is required before the expiration time. If the expiration time is not present, then it indicates that the PAS subscription never expires. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Contains the list of supported features among the ones defined in clause 6.3.8.This attribute shall be present only when feature negotiation needs to take place. |  |

\* \* \* \* End of changes \* \* \* \*